



# **State of California Board for Professional Engineers and Land Surveyors**



## **2003 Sunset Review Report**

Prepared for  
California Legislature  
Joint Legislative Sunset Review Committee



**CALIFORNIA STATE BOARD FOR  
PROFESSIONAL ENGINEERS AND LAND SURVEYORS**

**Gregg Brandow, S.E.**  
Structural Engineer Member  
President (2003/2004)

**Andrew J. Hopwood**  
Public Member  
Vice President (2003/2004)

**Arthur P. Duffy, P.E.**  
Civil Engineer Member

**James W. Foley, Jr., P.E.**  
Geotechnical Engineer  
Member

**David J. Fruchtmann, P.E.**  
Mechanical Engineer  
Member

**Michelle Gastelum**  
Public Member

**William Roschen**  
Public Member

**Millicent Safran**  
Public Member

**Cindy Tuttle**  
Public Member

**Elizabeth Warren**  
Public Member

**Michael K. Welch, P.L.S.**  
Land Surveyor Member

**Dale Wilson**  
Electrical Engineer Member

**Edward C. Yu**  
Public Member

**Executive Officer of the Board**  
Cindi Christenson, P.E.

# **Mission Statement**

The Mission of the Board for Professional Engineers and Land Surveyors is to safeguard the life, health, property, and welfare of the public by regulating the practices of professional engineering and land surveying. The Board accomplishes its Mission by:

- Licensing qualified individuals as professional engineers and land surveyors.
- Anticipating changes in the engineering and land surveying professions to ensure that the laws and regulations are contemporary, relevant, and responsive.
- Establishing regulations and promoting professional conduct.
- Enforcing laws and regulations.
- Providing information so that the public can make informed decisions regarding utilizing professional engineering and land surveying services.

# **Vision Statement**

The Board for Professional Engineers and Land Surveyors will have a major role in ensuring that Professional Engineers and Land Surveyors provide the highest quality professional services.

- Consumers and licensees will have access to comprehensive information through a wide range of technology and facilities.
- California Professional Engineers and Land Surveyors will possess the knowledge, skills, and abilities enabling them to meet the expectations of clients and consumers.
- The public will have a high degree of confidence in the engineering and land surveying of roads, bridges, buildings, and other facilities and systems.

September 1, 2003

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## **PART 1**

# **OVERVIEW OF THE CURRENT REGULATORY PROGRAM OF THE BOARD FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS**

## **BACKGROUND AND DESCRIPTION OF THE BOARD AND THE REGULATED PROFESSION**

### **History of the Board**

The Board of Registration for Civil Engineers was created in 1929 due to the failure of the Saint Francis Dam (Chapter 766, Statutes of 1929). A law was then enacted requiring the registration of civil engineers. When Committee hearings of the bill were held, a difference of opinion developed between proponents of registration by branch and those who favored registration in the category of professional engineer only. Opposition also developed from those engineers who were against the philosophy of licensing in general. The mining engineers strongly objected to any regulation of their activities as did some representatives of the mechanical and electrical engineering groups. Because the principle opposition came from groups who practiced in branches other than civil engineering, the bill was amended to exclude them and require registration of civil engineers only. It was in this form that Assembly Bill 174 was signed by the Governor (Chapter 801, Statutes of 1929). Initially the area of overlap between architecture and engineering was considered relatively unimportant, but as taller and taller buildings were being created it became a source of increasing controversy. To resolve the disputed area of overlap between architecture and structural engineering, a solution was offered creating the title authority of structural engineer. Registered civil engineers who were found to be qualified in structural engineering could use the title structural engineer. Civil engineers sponsored legislation creating the structural engineer title authority (Chapter 254, Statutes of 1931). In 1933, the Board's jurisdiction was expanded to include the licensing of land surveyors.

The technical advances made during the forties, possibly due to World War II, resulted in the registration, by title, of engineers in the branches of chemical, electrical, mechanical, and petroleum engineering. This was done through legislation in 1947. For the next twenty years, there were many influences of varying importance which contributed to the rapid advancement of engineering. The more noteworthy of these influences included the Korean War, the struggle for missile supremacy, and the race for exploration and control of space. Because of the more specialized use of electrical and mechanical engineering, the law was amended in 1967 to change electrical and mechanical engineering from title act registrations to practice act registrations. Also in 1967, the legislature created the title disciplines of metallurgical and industrial

engineering – which the Board opposed. A bill was then passed by the Legislature (Chapter 895, Statutes of 1968) which gave the authority to create new title acts to the Board. That bill also contained a provision that required any group of engineers applying for registration with the Board to first have in place an accredited college program in their respective branch of engineering. This made it very difficult for any new groups to apply for registration.

Several years passed, and the composition of the Board changed. In 1971, legislation was passed repealing the provision relating to the requirement that a discipline be covered by an accredited program. This legislation had the effect of removing a major road-block to the various disciplines seeking to apply to the Board for recognition, and various groups petitioned the Board for registration. In the early seventies, the Board received petitions from persons representing the branches of aerospace, agriculture, air pollution, communication, control system, corrosion, environmental, fire protection, manufacturing, nuclear, quality, safety, and traffic engineering. Hearings were held, and all petitions were approved except for the petitions of air pollution, aerospace, communication, and environmental engineers. In 1976 and 1977, the Board was finally able to adopt formal regulations to implement the engineering disciplines which it had recognized over the proceeding years.

In 1982, the title authority of geotechnical engineer was added to the practice of civil engineering by the Legislature (Chapter 646, Statutes of 1982).

In 1985, Senate Bill 1030 (Chapter 732, Statutes of 1985) was passed by the Legislature with support from this Board. The bill amended Section 6732 of the Business and Professions (B&P) Code to codify the existing engineering disciplines into the Professional Engineers Act, thereby recognizing them by statute rather than by Board Rule. It also repealed Section 6700.1 of the B&P Code which allowed for the establishment of new engineering disciplines by petition to the Board.

In 1999, examinations in three title acts (corrosion, quality, and safety) were eliminated. There are 10 remaining title acts in question: agricultural, chemical, control systems, fire protection, industrial, manufacturing, metallurgical, nuclear, petroleum and traffic engineering. The question remains how the public is protected by granting engineers a license which regulates the use of the title but not the practice. That is, anyone registered or not, can legally practice any title-act discipline as long as it does not fall within non-exempted civil, mechanical, or electrical engineering practice. Furthermore, if there is an enforcement case against a title-act engineer, the Board can revoke the title-act license, but the individual can still practice in that discipline, just as anyone not licensed can practice in a title-act discipline. Unlicensed people are only prohibited from using the title.

This year, there is Legislation (SB 364) to discontinue the examination for manufacturing engineering.



### **Function of the Board**

The Board is charged with safeguarding the life, health, property, and public welfare by regulating the practices of professional engineering and professional land surveying. The Board provides this public service by qualifying and licensing individuals, establishing regulations, enforcing laws and regulations, and providing information so that consumers can make informed decisions.

The regulation of engineers and land surveyors protects the public from incompetent, negligent, and unscrupulous individuals who would offer such services without having met any qualifications. The public is assured that licensed engineers or licensed land surveyors have met state-approved education, experience, and examination standards established by the Board. Engineers and land surveyors make professional judgments, which have major financial, health, safety, and other significant consequences on a daily basis. The highways, bridges, dams, waterways, buildings, and electrical and mechanical systems in buildings are all products of engineering. Consequences of poorly designed bridges or buildings include deaths and injuries as well as financial hardship to the property owner ultimately responsible for damages and reconstruction. Land surveyors help to define property boundaries. A miscalculation in a residential or commercial neighborhood could cause a property owner financial loss if the property is sold with an incorrect boundary. A structure could be located on another individual's property, with concomitant major financial losses and inability to convey title.

The complexity of engineering and land surveying projects necessitates a very high degree of technical knowledge and skill. The vast majority of licensed engineers hold a college degree in engineering. Calculus, physics, material science, and computer programming skills are required; these are knowledge and skills not typically possessed by members of the general public. Land surveyors make decisions based upon interpretation of legal documents and the use of high-tech locating instrumentation, including satellites and computer programming. Again, laypersons rarely possess these skills.

### **Current Composition of the Board**

There are thirteen (13) Board member positions on the Board for Professional Engineers and Land Surveyors. All appointments to the Board are for a term of four years, with vacancies filled by appointment for the unexpired term. Each appointment (or re-appointment) after the initial appointment, if the initial appointment fills an unexpired term, is for a four-year term expiring on June 1 of the fourth year following the year in which the previous term expired. Each member may remain on the Board until the appointment of his or her successor or until one year has elapsed after the expiration of the term for which he or she was appointed, whichever occurs first; this is known as the "grace year." No person is allowed to serve as a member of the Board for more than two consecutive full four-year terms. (Business and Professions Code [B&P] §6712)

There are seven (7) public member positions, appointed as follows: (B&P §§6711 & 6712)

- 5 public members are appointed by the Governor;
- 1 public member is appointed by the Senate Rules Committee; and,
- 1 public member is appointed by the Speaker of the Assembly.

There are six (6) professional member positions, all appointed by the Governor. The six professional member positions represent the branches or disciplines of engineering and land surveying listed below. In addition, one professional engineer must be from a local public agency and another professional engineer must be from a State agency. (B&P §§6711 & 6712)

- Civil Engineer
- Electrical Engineer
- Mechanical Engineer
- Structural Engineer
- Other Professional Engineer (representing one of the other branches or disciplines not already represented)
- Land Surveyor

As of September 1, 2003, there are no vacancies.

The current Board members, the position they are in, their appointment dates, and the expiration dates of the terms (as of September 1, 2003) are listed below:

Board Member	Position	Appointment Date	Expiration Date	Additional Information
Gregg Brandow	Structural Engineer	10/29/98	6/1/05	
Arthur P. Duffy	Civil Engineer	4/18/02	6/1/03	State agency
James W. Foley, Jr.	Other Professional Engineer (Geotechnical)	10/29/98	6/1/06	Local agency
David J. Fruchtman	Mechanical Engineer	4/18/02	6/1/04	
Michelle Gastelum	Public Member	8/19/03	6/1/04	
Andrew Hopwood	Public Member	12/4/96	6/1/03	Assembly Speaker Appointee
William Roschen	Public Member	11/25/02	6/1/06	
Millicent Safran	Public Member	7/14/95	6/1/07	Senate Rules Appointee
Cindy Tuttle	Public Member	8/19/03	6/1/06	
Elizabeth A. Warren	Public Member	11/25/02	6/1/04	
Michael K. Welch	Land Surveyor	4/18/02	6/1/03	
Dale J. Wilson	Electrical Engineer	4/18/02	6/1/05	State agency
Edward C. Yu	Public Member	11/25/02	6/1/06	

### **Committees of the Board**

There are four standing committees of the Board that focus on administration, examination, enforcement, and legislation. Each committee is comprised of Board members (typically five). The committees are established by the Board upon the recommendation of the Board President. The members are appointed by the President after consultation with the respective Board members, and the committees operate under a delegation of authority from the Board as a whole. The **Administrative Committee** focuses on fiscal responsibilities as well as customer service: meeting the needs of the consumer, the professional, and the applicants. The committee develops regulations to meet the fiscal needs of the Board. The **Examination/Qualifications Committee** focuses on efficient development of qualifying experience and the valid and defensible development and administration of examinations. The committee reviews 3-year delinquent applications and makes recommendations to the Board. The **Enforcement Committee** focuses on increasing public awareness of licensing of professional engineers and professional land surveyors; what the consumer can and should expect of such professionals; how to inquire about the license status of a given engineer or land surveyor before contracting with that person; and of the availability of the complaint process. The committee also makes a detailed review of the enforcement cases and makes recommendations to the Board. The **Legislative Committee** focuses on developing and tracking legislation to maintain and improve the level of consumer protection. The committee also monitors regulation packages.

The Board has also appointed standing Technical Advisory Committees under the provisions of §6728 and §8715 of the B&P Code, which consist of five technical members, all of whom are licensees of the Board, but none of whom are Board members. These committees have been appointed to advise Board members and staff on matters pertaining to civil engineering, electrical engineering, geotechnical engineering, mechanical engineering, structural engineering, and land surveying. In addition to the above-noted standing committees, the President, with the concurrence of the Board, occasionally appoints special committees to serve specific purposes. The life, charge, and operating procedures of such committees are determined by the establishing authority. Most recently the Board appointed a Task Force to review and make recommendations on the Title Act Study.

### **Licensing**

The Professional Engineers Act (PE Act) has had some major changes over the years since the Board's creation. The number of branches of engineering, which the Board regulates, has increased, and the status of some of the older branches has changed.

Currently, professional engineers are licensed through three (3) "Practice Act" categories of civil, electrical, and mechanical engineering, and through ten (10) "Title Act" categories of agricultural, chemical, control system, fire protection, industrial, manufacturing, metallurgical, nuclear, petroleum, and traffic engineering.

There are also two specialized “Title Authorities” for those already licensed as a civil engineer: structural and geotechnical (soils) engineer. In addition to the engineering branch titles already listed, titles also restricted to licensed engineers are “Consulting Engineer,” “Professional Engineer,” “Registered Engineer,” and “Licensed Engineer.”

There is only one category of licensure for land surveyors. They are regulated under the Professional Land Surveyors’ Act (PLS Act). Restricted titles for land surveyors are “licensed land surveyor,” “professional land surveyor,” “land surveyor,” “land survey engineer,” “survey engineer,” “geodetic engineer,” “geomatics engineer,” “geomatronic engineer,” “photogrammetrist,” and “photogrammetric surveyor,” or any combination thereof.

Certification, and the right to use the titles, is also provided to those designated as an “Engineer-In-Training” (EIT) or a “Land-Surveyor-In-Training” (LSIT). An EIT or LSIT will be certified after completing the qualifying experience and passing the required examination. The examinations, which test a person’s knowledge of the fundamentals of engineering and surveying, are usually taken and passed prior to applying for licensure as a professional engineer or land surveyor.

Not all engineers who practice in California have to be licensed. There are a number of licensing exemptions for engineers who are employees of licensed engineers or who work for industrial corporations, public utilities, or the federal government. In 1997, the industrial exemption was broadened to include temporary employees, contract employees, and those hired through third-party contracts.

### **Major Changes to the Board**

Several significant legislative changes have occurred since the last sunset review of the Board. They are as follows:

- SB 2030 (Figueroa) (Chapter 1006, Statutes of 2000) (from the 1999–2000 sunset review) amended numerous Sections of the B&P Code. It amended Section 6712 to provide that one of the engineer members of the Board must be from a local public agency and another must be from a state agency; placed the definitions of electrical and mechanical engineering in statute, Sections 6731.5 and 6731.6, respectively; added Section 6763.1 requiring the Board to use the national structural examination by December 31, 2004; and amended Section 8741.1 to require the Board to use the national land surveying examination by April 1, 2003. This bill also added Section 6704.1 requiring the Department of Consumer Affairs (DCA) to contract with an independent consulting firm to provide a comprehensive analysis of the title acts. It also expanded the Board’s existing “good Samaritan” immunity for engineers providing structural inspection services at a declared emergency.

- AB 2629 (Cox) (Chapter 976, Statutes of 2000) added Section 6749 requiring engineers to use a written contract when contracting to provide professional engineering services to a client and added Section 8759 requiring land surveyors and civil engineers authorized to practice land surveying to use a written contract when contracting to provide professional services to a client. This bill also authorized the Board to adopt rules and regulations of professional conduct that are not inconsistent with state and federal law. The rules and regulations may include definitions of incompetence and negligence.
- SB 136 (Figueroa) (JLSRC omnibus bill) (Chapter 495, Statutes of 2001) extended the Board's sunset date to July 1, 2004. This bill also amended Sections 6795 and 8801 to convert the Board's license renewal cycle from every four years to every two years and amended Sections 6799 and 8805 to increase engineering and land surveying application fees. This bill also extended the date by which the Board was to administer the national land surveying examination to June 1, 2003.

Since the last sunset review, the Board has made a number of regulatory changes to the Board Rules (Title 16, California Code of Regulations, Section 400, et seq.). The major changes are as follows:

- Amended Section 424.5 to clarify the steps that a licensee who has let his or her license become delinquent (one whose license has not been renewed within three years after its expiration) must take to qualify for his or her license to be reinstated. (Effective January 1, 2000)
- Adopted amendments to Sections 472 – 473.4 (citation and fine regulations). Among other things, these amendments clarified the existing regulations to allow a citation to be issued with both an order of abatement and a fine and to allow the cited person the right to request an administrative hearing after being served with the affirmation of a citation following an informal conference with the Executive Officer. (Effective January 1, 2000)
- Adopted Section 463.5 requiring every licensee to provide notice to his or her clients that the licensee is licensed by the Board for Professional Engineers and Land Surveyors. (Effective March 10, 2000)
- Adopted new Section 425 and amended Sections 424 and 438 to amend the experience requirements necessary to sit for the PLS examinations and define the terms “responsible field training” and “responsible office training.” (Effective February 24, 2001)
- Amended Section 442 to provide a detailed definition of examination subversion and set forth consequences that may apply to anyone found to have engaged in the prohibited activities, including the distribution of secured examination questions or materials. (Effective March 20, 2001)
- Amended Section 407 to establish a retired license category and the associated fee. (Effective April 14, 2001)
- Amended Section 411 describing the design, contents, and requirements of the official seal that must be affixed by engineers and land surveyors on plans, specifications, and reports. It also requires licensees to include the date of

signing and sealing immediately below or next to the signature and seal and authorizes the use of electronic seals and signatures. (Effective January 31, 2002)

- Amended Section 404 to include the definitions of negligence and incompetence. (Effective April 12, 2003)
- Amended Section 407 to reflect the increase in fees for applications, license renewals, and temporary licenses. This regulation also decreased the license renewal period to every two years. (Effective July 1, 2003)
- Added Sections 475 and 476 to specify the rules and regulations of the codes of professional conduct for engineers and land surveyors. (Effective July 4, 2003)

One significant change to the Board since the last sunset review is the composition of the Board itself. In the last two years, 9 new Board members have been appointed; this represents a majority of the 13-member Board. While there can be some delays in Board action while the new members get up to speed on issues before the Board, the new members also bring a fresh perspective from both the engineering and land surveying professions and the public/consumers. The new licensed members include people who have private practices and those who work for government agencies, as well as people who have worked in both the private and public areas of the professions. The new public members represent the diverse interests of the consumers, as well as bringing knowledge of the engineering and land surveying professions from a public perspective to the Board.

Unfortunately, the most significant change since the last sunset review is the impact that the budget crisis and especially the hiring freeze have had on the Board. In the last two years, the Board's staff has been reduced from 38.5 positions to 33.5 positions. An additional 3 positions have been frozen and will be lost this year. Most of the vacancies are due to staff members leaving the Board for promotional opportunities elsewhere; however, due to the hiring freeze, the Board was not able to fill these vacant positions. The Board's administrative unit has been reduced from 13 full-time and 4 part-time positions to 8 full-time and 2 part-time positions. This means that the Board is now only able to have one main receptionist, rather than two, to answer telephone calls and greet visitors to the Board office; the Board is also unable to have a full-time mail clerk to process all of the incoming mail (including e-mails from the Board's website), thus causing delays in the distribution of the mail and the ability of staff to timely respond to the inquiries. The Board's enforcement and legislative unit (which also includes publications and the website) was reduced from 8 full-time and 2 part-time positions to 5 full-time and 2 part-time positions. This means that the Board is not able to timely maintain, update, and expand its website or publications or to process the consumer complaints in a reasonable time frame.

The Board continues to conduct an annual strategic planning session to review the accomplishments of the Board during the previous year and to revise the plan to reflect future goals and objectives. (Attachment 1)

One of the most valuable internal changes at the Board since the last sunset review is a greatly enhanced website (<http://www.dca.ca.gov/pels>). The Board has made it more conducive for use by consumers, complainants, applicants, and licensees. In addition to all of the Board's publications being available on the site, it also includes the consumer complaint form, the Professional Engineers Act, the Professional Land Surveyor's Act, the Board Rules, and the applications for certification or licensure. The website also has license look-up capabilities and accounts of all disciplinary actions taken since 1990. Another internal change was to increase our consumer outreach and education. Consumer education is the most cost-effective form of consumer protection. The Board publishes a free publication, "Consumer Guide to Professional Engineering and Professional Land Surveying," that is distributed to libraries, to city and county agencies, and at public outreach meetings and consumer fairs; it is also available on the Board's website. The Board's highest priority is immediate dissemination of information following floods, earthquakes, or other disasters, when many consumers need the services of an engineer or land surveyor. Unfortunately, due to recent budget cuts, the Board has lost the staff position that maintained the Board's website. Certain actions by the Board, such as meeting notices, are required by law to be posted on the website in a timely manner. All areas of the website that require updating are being maintained by an analyst in the enforcement unit. Other areas of the website are not being updated at this time.

### **Major Studies**

Among other things, Senate Bill 2030 (Figueroa) (Chapter 1006, Statutes of 2000) added Section 6704.1 to the Professional Engineers Act requiring the Department of Consumer Affairs (DCA) to contract with an independent consulting firm to perform a comprehensive analysis of the title acts of the Board. The legislation also required the Board to be responsible for paying for the study. The California State University Sacramento Institute for Social Research (ISR) conducted a two-year Engineering Title Act Study (Attachment 2) for DCA, as mandated by SB 2030. The Board has appointed a Title Act Study Task Force comprised of Board members, Legislative staff consultants, and a number of public members and licensees to review the report and make a recommendation to the Board. The first meeting of the Task Force was held on August 21, 2003. Public comments were received from professional engineers and professional associations regarding the study. The Task Force plans to hold another meeting to obtain further public comments before making its recommendation to the Board.

## **Licensing Data**

There are approximately **103,387** Professional Engineers and Land Surveyors licensed by the Board for FY 2002/03. The following provides licensing data for the past four years:

LICENSING DATA		FY 1999/00	FY 2000/01	FY 2001/02	FY 2002/03	
California		70,992	72,191	76,558	80,076	
Out-of-State		23,133	23,449	23,248	23,580	
Registered Licensees (Type)		Total: 94,125	Total: 95,640	Total: 99,806	Total: 103,656	
Title Acts	Civil	43,619	43,726	44,840	45,923	
	Geotechnical	1,217	1,225	1,224	1,268	
	Structural	3,277	3,183	3,182	3,303	
	Electrical	8,171	8,379	8,423	8,392	
	Mechanical	14,660	14,897	15,017	15,264	
	Land Surveyor	3,865	3,829	3,907	3,953	
	Agricultural	309	296	256	258	
	Chemical	2,140	2,135	2,012	2,055	
	Consulting	26	18	19	18	
	Control System	2,410	2,397	2,187	1,964	
	Corrosion	521	508	395	398	
	Fire Protection	883	884	795	796	
	Industrial	854	855	846	641	
	Manufacturing	1,394	1,372	1,301	1,110	
	Metallurgical	417	422	426	430	
	Nuclear	1,038	1,023	846	850	
	Petroleum	482	481	469	473	
	Photo Surveyor	13	8	9	9	
	Quality	1,771	1,744	1,601	1,359	
	Safety	1,161	1,141	911	897	
	Traffic	1,398	1,414	1,346	1,409	
	EIT Certificate	4,309	5,319	9,139	12,041	
	LSIT Certificate	190	384	655	845	
	Applications For Exams		Total: 7,034	Total: 9,118	Total: 11,477	Total: 11,624
	Professional Engineer	2,889	4,792	6,278	6,450	
	Land Surveyor	135	301	343	308	
	Structural	127	181	328	308	
Geotechnical	62	57	95	91		
EIT/LSIT	3,821	3,787	4,433	4,467		

(Licensing Data Table continued on next page)



<b>LICENSING DATA (cont'd)</b>	<b>FY 1999/00</b>	<b>FY 2000/01</b>	<b>FY 2001/02</b>	<b>FY 2002/03</b>
<b>Licenses Issued (Type)</b>	<b>Total: 5,526</b>	<b>Total: 5,284</b>	<b>Total: 5,379</b>	<b>Total: 5,750</b>
Civil	1,148	1,998	1,613	1,694
Geotechnical	34	36	35	22
Structural	111	60	41	114
Electrical	145	301	320	331
Mechanical	304	422	372	379
Land Surveyor	92	127	105	61
Agricultural	1	0	2	0
Chemical	55	43	51	54
Control Systems	15	7	13	10
<i>Corrosion (eliminated 1/1/99)</i>	0	0	0	0
Fire Protection	28	11	11	22
Industrial	3	2	5	4
Manufacturing	1	1	2	1
Metallurgical	5	5	3	4
Nuclear	1	3	0	0
Petroleum	3	0	5	2
<i>Quality (eliminated 1/1/99)</i>	1	0	0	0
<i>Safety (eliminated 1/1/99)</i>	0	0	0	0
Traffic	38	33	27	52
EIT Certificate	3307	2059	2620	2821
LSIT Certificate	234	176	154	179
<b>Renewals Issued</b>	<b>Total: 21,920</b>	<b>Total: 23,469</b>	<b>Total: 22,404</b>	<b>Total: 0,924</b>

## BUDGET AND STAFF

### **Current Fee Schedule**

The Board relies on its license renewal fees for its main revenue source. License renewals account for 65% of the Board's total revenue. Another 33% in revenue comes from examination application fees. The remaining 2% includes reimbursements, fines/citations, delinquency fees and other miscellaneous fees. Renewals are paid every two years. Effective July 1, 2003, examination application fees increased from \$175 to \$275. License renewals increased to \$150 every two years from \$160 every four years effective July 1, 2003, and will be reduced to a \$100 renewal fee every two years effective July 1, 2005. The fee increase was needed to pay for the Board's operating expenses, which are expected to exceed revenue by over \$900,000 in FY 2004-05 at the current rate of revenue and expenses. During the last several fiscal years, the Board's reserve fund has decreased because of cost increases. In addition to resolving the deficiency, the fee restructure will reduce the high percentage of subsidization license renewal revenue provides to support the costs of the Examination Program. The authority to increase the fees was enacted in 2001 (SB 136/Ch. 495); the regulations implementing the increase became effective July 1, 2003.

Current Fee Schedules And Range			
Fee Schedule	Previous Fee	Statutory Limit	Current
Application/Examination Fee:			
Professional	\$175	\$400	\$275
In-Training	\$160	\$100	\$100
Renewal Fee	\$160 every 4 yrs	Not more than the application fee	\$150 every 2 yrs*
Delinquency Fees	\$80	Not more than 50% of renewal fee in effect on the date of reinstatement	\$75
Examination Appeal Fee	\$134	\$134 – set by regulation, not statute	no change
Duplicate Certificate Fee	\$10	\$10 – set by regulation, not statute	no change

\*License renewal fee is \$150 every 2 years effective for licenses that renew on or after July 1, 2003, with a reduction to \$100 every two years effective for licenses that renew on or after July 1, 2005.

### **Revenue, Expenditure History, and Fund Condition**

The Board's renewal revenue maintains a consistent four-year trend that spikes by approximately 25% every fourth fiscal year. The last spike-year was FY 2001-02, and the next is expected in FY 2005-06. This trend will level off to a more consistent revenue pattern with the biennial renewals. The amount of renewal revenue also increased each fiscal year by approximately 2-3% because of the increase in the number of new licensees. Examination application revenue has steadily climbed from a low point of \$1.6 million in FY 1997-98 to \$2.1 million in FY 2001-02. Prior to FY 1997-98, the Board's application revenue experienced a 4-year decline beginning with FY 1994-95 until it reached the low point in FY 1997-98. Excluding the Board's

legal fee reimbursements received, revenue has steadily increased overall by 8% since FY 1999-00.

The Board's overall expenditures since FY 1999-00 have remained consistent because cost increases for examination population increases have been accommodated by expense cuts. Examination population increases began in FY 1999-00 and are projected to continue through FY 2004-05. Because the Board purchases the majority of its exams from a national organization, the fees for examination grading and purchase are dictated by the national organization and increase with the examination population. From FY 1999-00 to FY 2002-03, these examination population cost increases totaled \$440,000. The Board's average yearly expenditure since FY 1999-00 has been \$7.2 million. Projections for FY 2003-04 and FY 2004-05 do not include reductions in personal services that may be required to accommodate the statewide budget deficit.

With regard to the Board's fund condition, the reserve will slowly increase from FY 2003-04 to FY 2005-06 as a result of the July 1, 2003, mandated license renewal and examination application fee increases.

<b>REVENUE AND EXPENDITURE HISTORY</b>						
REVENUES	ACTUAL				PROJECTED	
	FY 99-00	FY 00-01	FY 01-02	FY 02-03	FY 03-04	FY 04-05
Application Exam/License	\$1,796,283	\$1,954,639	\$2,182,281	\$2,410,676	\$4,283,890	\$4,813,103
Renewal Fees	3,583,462	3,470,985	4,114,779	3,128,663	3,390,520	3,271,870
Delinquency Fees	57,600	54,800	57,440	50,160	56,000	48,000
Duplicate License/Cert.	3,920	5,400	3,960	3,080	4,000	4,000
Fines (Citations)	16,676	14,951	25,100	12,392	17,000	17,000
Other Miscellaneous	13,956	15,954	9,328	9,276	9,500	9,500
Interest	257,234	322,839	176,544	80,246	113,344	143,420
Legal Fees: reimbursement	-	940,672	0	-	-	-
<b>TOTAL REVENUE</b>	<b>5,729,131</b>	<b>6,780,240</b>	<b>6,569,432</b>	<b>5,694,493</b>	<b>7,874,254</b>	<b>8,306,893</b>
<b>TOTAL REIMBURSEMENTS</b>	<b>43,149</b>	<b>49,436</b>	<b>114,274</b>	<b>48,911</b>	<b>48,000</b>	<b>48,000</b>
<b>TOTAL RECEIPTS</b>	<b>\$5,772,280</b>	<b>\$6,829,676</b>	<b>\$6,683,706</b>	<b>\$5,743,404</b>	<b>\$7,922,254</b>	<b>\$8,354,893</b>

EXPENDITURES	ACTUAL				PROJECTED	
	FY 99-00	FY 00-01	FY 01-02	FY 02-03	FY 03-04	FY 04-05
Personnel Services	\$2,315,908	\$2,394,406	\$2,312,911	\$2,272,037	\$2,156,662	\$2,156,662
Operating Expenses	4,732,454	4,578,879	5,154,811	4,908,806	4,842,338	5,192,754
TOTAL OE & E AND PS	7,048,362	6,973,285	7,467,722	7,180,843	6,999,000	7,349,416
'(-) Reimbursements	(43,149)	(49,436)	(114,274)	(48,911)	(48,000)	(48,000)
'(-) Distributed Costs:	-	-	-	-	-	-
<b>TOTALS</b>	<b>\$7,005,213</b>	<b>\$6,923,849</b>	<b>\$7,353,448</b>	<b>\$7,131,932</b>	<b>\$6,951,000</b>	<b>\$7,301,416</b>

### **Expenditures by Program Component**

The Board's expenditures by program components now breakout the Administrative Program costs to more accurately reflect expenditure trends. Program component

breakouts in previous fiscal years distributed administrative costs amongst the Board's three programs (Examination, Licensing, and Enforcement). Since FY 1998-99, the majority of the Board's expenses (54%) have been utilized for the Examination Program averaging approximately \$3.8 million each FY. Second in line is the Administrative Program at 20% averaging approximately \$1.4 million. The Enforcement Program averages 19% in costs or \$1.3 million. Lastly, the Licensing Program accounts for an average of 8% of the Board's expenses averaging approximately \$569,000.

The Board's total personal services costs average 32% of total expenditures and include all employee pay and benefit expenses. Operating expenses average 68% of the Board's total expense and include all other costs that are not personal services. With the exception of direct program costs (i.e., Attorney General, Examination Facility Rent, Teale), the Board's total operating expense cost distribution by program is based upon percentage of employees in each program.

**Examinations:** The Examination Program's costs have stayed fairly consistent since FY 1999-00. Personal services expenditures average \$839,000 or 22% of the Examination Program's total cost, and operating expense costs average \$3.2 million or 78%. The majority of the Program's operating expense (\$2.3 million) pays for direct costs to administer, develop, and grade the exams. These exam-related costs consume 50% of the Board's total operating expenses. These include examination facility rental, examination contract costs, and subject matter expert expenses. The program's personal services costs are lower than the Board's other programs because a large portion of the examination development is done through individual contracts with subject matter experts which is categorized as an operating expense. Changes in the Examination Program's expenditures have been accommodated by redirections and/or expense cuts. These include a redirection of examination contract funds to personal services to absorb added staff work on in-house examination development. This redirection took place in FY 2000-01 during the same year the Board's Quality, Safety, and Corrosion exams were eliminated pursuant to (AB 969) (Chapter 59 Statutes of 1998). The savings generated from elimination of these exams (\$82,000) absorbed national examination fee increases instituted that year, subject matter expert increases previously included in the Board's examination development vendor contract, and paid for an increase in personal services funds needed for in-house examination development. At that time, the Board decided a shift in examination vendor contract responsibilities to Board staff could help curb examination vendor inflationary costs.

**Enforcement:** The Enforcement Program's personal services costs since FY 1999-00 average \$431,000 or 32% of the Program's total expenditures, and the operating expenditures average \$895,000 or 68%. Personal services costs have reduced each FY since FY 1999-00 by an overall 27%. This reduction is due to the FY 2001-02 statewide required cut in vacant positions that reduced Enforcement staff by two positions. The Program's direct operating expenses include costs for Attorney General, Office of Administrative Hearing, evidence witnesses, and DCA Division of Investigations (DOI). These direct costs fluctuate between \$300,000 and \$500,000 each fiscal year dependent upon the Enforcement Program's caseload.

**Administration:** The Administration Program's personal services costs since FY 1999-00 average \$771,000 or 55% of the Program's total expenditures, and the operating expenditures average \$637,000 or 45%. Personal services costs have decreased by a total of 9% since FY 2001-02 as a result of two Administrative Program positions cut due to the statewide required elimination of vacant positions.

**Licensing:** The Licensing Program's personal services costs since FY 1999-00 average \$282,000 or 51% of the Program's total expenditures, and the operating expenditures average \$287,000 or 49%. The operating expenditures for the Licensing Program in FY 2001-02 were significantly higher than prior fiscal years because the Board paid \$36,000 to DCA for the Applicant Tracking System upgrade and another \$188,000 reimbursement to DCA for the review of its title act licensing categories as mandated by AB 969 (Chapter 59, Statutes of 1998).

Expenditures by Program Components					
Expenditures by Program Component	FY 99/00	FY 00/01	FY 01/02	FY 02/03	Average % Spent by Program
Examinations	\$3,613,463	\$3,780,918	\$4,023,054	\$4,037,501	54%
Enforcement	\$1,507,512	\$1,285,445	\$1,246,015	\$1,267,324	19%
Administration	\$1,489,502	\$1,423,748	\$1,423,660	\$1,294,524	20%
Licensing	\$437,885	\$483,174	\$774,995	\$581,491	8%

### **Fund Condition**

The Board does not project a deficit in the near future and does not project the need to increase fees or reduce its current fees. As required by Business and Professions Code Section 128.5, the Board will not have unencumbered funds that equals or is more than the Board's operating budget for the next two fiscal years. Since FY 1997/98, the Board projected a fund reserve deficit for FY 2003/04 but later moved that projected deficit FY 2004/05 because of increases in examination population revenue. Fee increases were enacted in 2001 as needed to pay for the Board's operating expenses projected to exceed revenue by over \$900,000 in FY 2004/05. The deficit was a result of cost increases over the years absorbed within the Board's existing budget. In addition to resolving the deficiency, the fee restructure will reduce the high percentage of subsidization license renewal revenue provides to support Examination Program costs. The authority to increase the fees was enacted in 2001 at the same time the laws changed to require renewals every two years instead of every four years. The FY 2002/03 fund reserve level reduced below a three-month reserve level but will gradually increase up to a 5.5 month reserve level by FY 2005/06.

An analysis of the Board's historical expenditure requirements shows that at least a two-month reserve level must be maintained to accommodate possible examination population drops that decrease revenue and for fee increases imposed every four to five

years by the national organization for purchase and grading of exams. Such increases are beyond the Board's control, and the Board can no longer absorb them within its current budget without cuts to existing programs functions. With regard to spending trends, the Board will experience a \$293,000 total ongoing increase for fee increases required by the national organization in FY 2004/05 for the purchase and grading of exams including costs for an increased examination population. Examination population increases have occurred each fiscal year since FY 1999-00.

<b>ANALYSIS OF FUND CONDITION</b>						
	<b>2000-01 Actual</b>	<b>2001-02 Actual</b>	<b>2002-03 Actual</b>	<b>2003-04 Projected</b>	<b>2004-05 Projected</b>	<b>2005-06 Projected</b>
Beginning Reserve, July 1	3,751,531	3,632,583	3,034,333	1,660,346	2,237,673	2,953,000
Prior Year Adjustments	24,791	185,734	63,582			
Total Adjusted Reserves	3,776,322	3,818,317	3,097,915	1,660,346	2,237,673	2,953,000
<b>REVENUE</b>						
License Fees	5,516,729	6,393,049	5,614,246	7,767,510	8,170,000	8,170,000
Interest *	322,839	176,544	80,246	83,017	113,000	149,000
Legal Fee Reimbursement	940,672					
Total Revenue & Transfers	6,780,240	6,569,593	5,694,492	7,850,527	8,283,000	8,319,000
<b>TOTAL RESOURCES</b>	<b>10,556,562</b>	<b>10,387,910</b>	<b>8,792,407</b>	<b>9,510,873</b>	<b>10,520,673</b>	<b>11,272,000</b>
<b>EXPENDITURES**</b>	6,973,285	7,467,722	7,180,843	7,244,000	7,583,673	7,735,346
Reimbursements	(49,436)	(114,274)	(48,912)	(16,000)	(16,000)	(16,000)
Century Change	130	129	130			
State Controller's Office Adj.						
<b>TOTAL EXPENDITURES</b>	<b>6,923,979</b>	<b>7,353,577</b>	<b>7,132,061</b>	<b>7,228,000</b>	<b>7,567,673</b>	<b>7,719,346</b>
RESERVE, JUNE 30	3,632,583	3,034,333	1,660,346	2,282,873	2,953,000	3,552,654
MONTHS IN RESERVE	6.3	5.0	2.8	3.8	4.7	5.5

\*Interest estimated at: 5.00%

\*\* Total expenditure growth projected at 2% beginning with FY 2004/05.

## LICENSURE REQUIREMENTS

### **Education, Experience and Examination Requirements**

There are three categories of Professional Engineer licensure available in California: (1) practice act, (2) title act, and (3) title authority. The practice acts are civil, electrical, and mechanical engineering. Practice act means that only a person appropriately licensed with the Board may practice or offer to practice these branches of engineering. The title acts are agricultural, chemical, control system, fire protection, industrial, manufacturing, metallurgical, nuclear, petroleum, and traffic engineering. Title act means that only a person licensed by the Board in that branch of engineering may use the title in any manner. The title authorities exist for two sub-branches of civil engineering: structural engineering and geotechnical engineering. A title authority indicates a proficiency in that field greater than what is required for civil engineering licensure and gives the licensee the right to use certain titles. Persons who pass the written examination will be issued a license in the branch of engineering for which they applied. The Board administers exams in 20 distinct topics throughout the year, six of which are unique to the State of California: land surveyor, traffic, special civil seismic principles and engineering surveying, geotechnical, and structural. The remaining examinations are purchased from the National Council of Examiners for Engineers and Surveyors (NCEES).

There are two ways to qualify for licensure as a Professional Engineer in the State of California:

- The first is to pass the Engineer-In-Training examination (EIT). This test is an eight-hour examination covering basic college math, chemistry, physics, and engineering topics. With a passing score on the EIT, the candidate then needs to verify six years of qualifying experience to take the Professional Engineering examination, which is an eight-hour technical examination. Civil engineering candidates have two additional 2-1/2 hour California specific exams covering seismic principles and engineering surveying. The Board allows educational experience credits towards the six-year total, with appropriate verification. The Board also requires references from a minimum of four engineers licensed in the discipline for which the applicant is applying. Qualifying work experience can only be gained by working in engineering positions under the direction of a licensed engineer for the discipline to which the candidate is applying. When qualifying work experience is gained outside of the United States, the references for that experience must be from persons authorized to practice engineering in accordance with the laws of the country in which the experience took place. If such references are not licensed engineers, they must provide information that indicates by what authority they are authorized to practice engineering.
- The second path is to waive the EIT by verifying the candidate's engineering degree and 14-17 years of work experience (depending on the accreditation of the engineering degree) and then passing the PE exams.

The structural and geotechnical authorities require additional experience after the candidate receives his or her civil engineering license. The structural candidate must have three years of responsible charge experience in structural engineering, whereas the geotechnical candidate must have four years of responsible charge in geotechnical engineering.

In order to qualify to sit for the Land Surveyor examination, a candidate must submit evidence of one of the following:

- Graduation from a four-year land surveying curriculum with a Bachelor of Science degree or equivalent approved by the Board and two (2) years of actual broad based progressive experience, including one (1) year of responsible field training and one (1) year of responsible office training satisfactory to the Board, and possession of a land surveyor-in-training certificate.
- At least six (6) years of actual broad-based progressive experience in land surveying including one (1) year of responsible field training and one (1) year of responsible office training satisfactory to the Board, and possession of a professional land surveyor-in-training certificate or engineering-in-training certificate.
- Registration as a civil engineer with two (2) years of actual broad based progressive experience in land surveying satisfactory to the Board.

### **Verification of Information Regarding Education and Experience**

Applicants for licensure in all categories are required to submit an original, signed application, which includes original transcripts to verify education, and original signed and sealed references to verify experience. The applications for licensure require candidates to reveal any criminal history or licensure denial, discipline, suspension, or revocation. Applications are signed under penalty of perjury. If the Board has any doubt as to the validity of the information provided by the applicant, clarification is requested either by mail or phone interview with applicants and references. Board staff will contact the university, past and current employers, and other state licensing boards if necessary. Currently, the Board is unable to collect fingerprints to obtain criminal history information for its applicants and licensees.

### **Passage Rates for All Examinations and Occupational Analysis Performed**

Passage rates for all examinations are included in the following tables. Overall pass rates typically range from 30 to 50 percent, with first time test takers performing much better than repeat test takers. Occasionally, anomalies in pass rates appear; these are carefully reviewed and additional statistical analysis performed to determine the underlying performance issues.



**Examination Passage Rates for All Examinations**

<b>ENGINEER-IN-TRAINING (National Examination)</b>				
	<b>1999/2000</b>	<b>2000/01</b>	<b>2001/02</b>	<b>2002/03</b>
<b>CANDIDATES</b>	4514	4900	5744	5996
<b>PASS %</b>	44.50%	41.69%	44.85%	31.67%

<b>LAND SURVEYOR-IN-TRAINING (National Examination)</b>				
	<b>1999/2000</b>	<b>2000/01</b>	<b>2001/02</b>	<b>2002/03</b>
<b>CANDIDATES</b>	447	496	532	561
<b>PASS %</b>	34.79%	35.00%	28.59%	31.67%

<b>AGRICULTURAL ENGINEERING (National Examination)</b>				
	<b>1999/2000</b>	<b>2000/01</b>	<b>2001/02</b>	<b>2002/03</b>
<b>CANDIDATES</b>	1	2	3	0
<b>PASS %</b>	0.00%	0.00%	33.33%	n/a

<b>CHEMICAL ENGINEERING (National Examination)</b>				
	<b>1999/2000</b>	<b>2000/01</b>	<b>2001/02</b>	<b>2002/03</b>
<b>CANDIDATES</b>	78	69	74	93
<b>PASS %</b>	36.63%	34.28%	47.08%	48.27%

<b>CIVIL ENGINEERING (National Examination)</b>				
	<b>1999/2000</b>	<b>2000/01</b>	<b>2001/02</b>	<b>2002/03</b>
<b>CANDIDATES</b>	3472	3898	4261	4492
<b>PASS %</b>	30.74%	36.99%	33.43%	37.09%

<b>CONTROL SYSTEM ENGINEERING (National Examination)</b>				
	<b>1999/2000</b>	<b>2000/01</b>	<b>2001/02</b>	<b>2002/03</b>
<b>CANDIDATES</b>	17	9	11	12
<b>PASS %</b>	82.35%	55.56%	81.82%	75.00%

<b>ELECTRICAL ENGINEERING (National Examination)</b>				
	<b>1999/2000</b>	<b>2000/01</b>	<b>2001/02</b>	<b>2002/03</b>
<b>CANDIDATES</b>	426	429	501	518
<b>PASS %</b>	25.45%	20.96%	35.06%	37.37%

<b>FIRE PROTECTION ENGINEERING (National Examination)</b>				
	<b>1999/2000</b>	<b>2000/01</b>	<b>2001/02</b>	<b>2002/03</b>
<b>CANDIDATES</b>	34	28	28	36
<b>PASS %</b>	61.76%	28.57%	25.00%	41.67%

<b>INDUSTRIAL ENGINEERING (National Examination)</b>				
	<b>1999/2000</b>	<b>2000/01</b>	<b>2001/02</b>	<b>2002/03</b>
<b>CANDIDATES</b>	7	6	9	7
<b>PASS %</b>	28.57%	16.67%	55.56%	42.86%

<b>LAND SURVEYING (National Examination)</b>				
	<b>1999/2000</b>	<b>2000/01</b>	<b>2001/02</b>	<b>2002/03</b>
<b>CANDIDATES</b>	<b>NOT OFFERED</b>			467
<b>PASS %</b>				68.52%

<b>MANUFACTURING ENGINEERING (National Examination)</b>				
	<b>1999/2000</b>	<b>2000/01</b>	<b>2001/02</b>	<b>2002/03</b>
<b>CANDIDATES</b>	3	2	3	3
<b>PASS %</b>	33.33%	50.00	66.67%	33.33%

<b>MECHANICAL ENGINEERING (National Examination)</b>				
	<b>1999/2000</b>	<b>2000/01</b>	<b>2001/02</b>	<b>2002/03</b>
<b>CANDIDATES</b>	515	469	518	534
<b>PASS %</b>	43.16%	31.54%	41.45%	46.20%

<b>METALLURGICAL ENGINEERING (National Examination)</b>				
	<b>1999/2000</b>	<b>2000/01</b>	<b>2001/02</b>	<b>2002/03</b>
<b>CANDIDATES</b>	4	3	2	4
<b>PASS %</b>	100.00%	100.00%	100.00%	75.00%

<b>NUCLEAR ENGINEERING (National Examination)</b>				
	<b>1999/2000</b>	<b>2000/01</b>	<b>2001/02</b>	<b>2002/03</b>
<b>CANDIDATES</b>	1	2	0	0
<b>PASS %</b>	100.00%	100.00%	n/a	n/a

<b>PETROLEUM ENGINEERING (National Examination)</b>				
	<b>1999/2000</b>	<b>2000/01</b>	<b>2001/02</b>	<b>2002/03</b>
<b>CANDIDATES</b>	16	13	8	11
<b>PASS %</b>	18.75%	46.15%	25.00%	18.18%

<b>SEISMIC PRINCIPLES (Special Civil – State Specific Examination)</b>				
	<b>1999/2000</b>	<b>2000/01</b>	<b>2001/02</b>	<b>2002/03</b>
<b>CANDIDATES</b>	3529	3930	2681	4515
<b>PASS %</b>	38.38%	38.34%	60.05%	40.63%

<b>ENGINEERING SURVEYING (Special Civil – State Specific Examination)</b>				
	<b>1999/2000</b>	<b>2000/01</b>	<b>2001/02</b>	<b>2002/03</b>
<b>CANDIDATES</b>	3405	3871	4419	4496
<b>PASS %</b>	43.03%	39.59%	41.23%	36.53%

<b>STRUCTURAL ENGINEERING (State Specific Examination)</b>				
	<b>1999/2000</b>	<b>2000/01</b>	<b>2001/02</b>	<b>2002/03</b>
<b>CANDIDATES</b>	246	226	281	289
<b>PASS %</b>	39.84%	22.57%	12.10%	35.00%

<b>GEOTECHNICAL ENGINEERING (State Specific Examination)</b>				
	<b>1999/2000</b>	<b>2000/01</b>	<b>2001/02</b>	<b>2002/03</b>
<b>CANDIDATES</b>	103	88	91	85
<b>PASS %</b>	33.01%	37.50%	30.77%	51.00%

<b>TRAFFIC ENGINEERING (State Specific Examination)</b>				
	<b>1999/2000</b>	<b>2000/01</b>	<b>2001/02</b>	<b>2002/03</b>
<b>CANDIDATES</b>	73	85	94	104
<b>PASS %</b>	49.32%	38.82%	28.72%	45.19%

<b>LAND SURVEYING (State Specific Examination)</b>				
	<b>1999/2000</b>	<b>2000/01</b>	<b>2001/02</b>	<b>2002/03</b>
<b>CANDIDATES</b>	533	493	443	507
<b>PASS %</b>	22.90%	20.89%	12.64%	14.20%

### **Occupational Analyses**

The Board completes an occupational analysis at least every five to seven years to assess the appropriateness of prerequisites required for candidates before they are admitted to take an examination and to develop a current test plan. A validation study is completed to identify the critical job activities performed by licensed engineers and licensed surveyors and review their practice in California. The purpose of the occupational analysis is to define practice for licensed engineers and surveyors in terms of the actual tasks that candidates must be able to perform at the time they are licensed. The results of the occupational analysis serve as the basis for the examination program for licensed engineers and surveyors.

The test plan of a licensure examination defines the content of the examination; it identifies the knowledge, skills, and abilities required for minimally acceptable competence, and it specifies the percentage of the test that should relate to each of these proficiencies. By linking the questions to the specification of the test plan, the job-relatedness of the examination is established.

Test validation experts recommend test plans be updated every five years. In 1993, the Board adopted a schedule that provides funding for a new occupational analysis and test plan for each Board-developed examination every five years. Examinations purchased from the National Council of Examiners for Engineering and Surveying (NCEES) have had a longer cycle in the past; however, the California Board has requested that this be shortened to 5 years. Wherever possible, NCEES has complied with this request. A schedule detailing the occupational analyses of the Board's examinations, as excerpted from "Section 139(c) Report – August 2003," follows.

<b>State Specific Examinations</b>	<b>Last Analysis</b>	<b>Next Analysis</b>
Geotechnical	2001	2007
Land Surveyor	2002	2007
Special Civil	1996 (Subject Matter Expert test-plan update 2000)	2003
Structural	1997 (Subject Matter Expert test-plan update 1999)	In Progress
Traffic	1999	2005

<b>National Examinations</b>	<b>Last Analysis</b>	<b>Next Analysis</b>
Engineer-in-Training	1989	2003
Land Surveyor-in-Training	1989 (Subject Matter Expert test-plan update 1999)	2003
Chemical	2002	To Be Determined (TBD)
Civil	1999	2003
Electrical	1999	TBD
Mechanical	1999	TBD
Agricultural	2000	TBD
Control System	2002	TBD
Fire Protection	2002	TBD
Industrial	1989 (Subject Matter Expert test-plan update 1999)	2003
Manufacturing	1999	TBD
Metallurgical	1999	TBD
Nuclear	2003	TBD
Petroleum	1999	2005

### **Time Frame for Certification/Licensure by the Board**

Unlike Boards with on-going testing, this Board administers civil, chemical, electrical, and mechanical engineering exams as well as EIT and LSIT exams twice a year. Land surveying, agricultural, control system, fire protection, geotechnical, industrial, manufacturing, metallurgical, nuclear, petroleum, structural, and traffic exams are administered once a year. The time from final filing date of applications to examination is consistent from year to year. The time from an examination date to issuance of license is also consistent from year to year. The length of time depends upon the examination grading process, but is not less than 3 months or more than 4 months.

<b>AVERAGE DAYS TO RECEIVE LICENSE/ CERTIFICATE</b>	<b>EIT/LSIT</b>	<b>PE/PLS</b>
Application to Examination:	60	105
Examination to Issuance:	91 - 122	
<b>Total Average Days:</b>	151 - 182	196 - 227

### **Continuing Education/Competency Requirements**

There is no requirement that engineers or land surveyors participate in continuing education as a condition for license renewal, nor does the Board currently plan to adopt any such program. The Board may require as a condition of disciplinary probation remedial education, including ethics courses, for engineers or land surveyors found to be guilty of violating the PE or PLS Acts.

### **Comity/Reciprocity and Temporary Licensing Process**

The Board continues to offer temporary licenses to professional engineers and land surveyors from other states and countries. The statutes limit the professionals granted a temporary license to one project only and for a 180-day time limit. The majority of civil engineers who utilize the temporary statute have later obtained permanent licensure status in the state of California. Although all professional disciplines are eligible for temporary licensure, the Board only receives application from civil engineers and land surveyor applicants. This is due to the state specific examination requirements for civil engineers and land surveyor licensure in California: the California Seismic Principles and Engineering Surveying examination for civil engineers and the state specific Professional Land Surveyors examination. Comity is postponed until the candidate's examination requirements are completed. Therefore, all of our temporary applicants are civil engineer or land surveyor applicants. Other disciplines can receive comity licensure at the next available Board meeting (6-10 weeks). During the energy crisis in winter of 2001, the Board saw a substantial increase in temporary license requests in order to complete the civil engineering design of energy power stations throughout California.

An engineer or surveyor registered in another state may apply for licensure in California by comity. Comity applicants must submit a complete application including work descriptions, references that can verify the work experience, college transcripts (optional), and verification of successful examination in another state. The complete application must be reviewed and approved by a Staff Engineer or Land Surveyor Consultant. In addition, comity applicants must take and pass the California Laws and Board Rules examination, a 25-question multiple-choice examination that is completed at home and returned to the Board office for scoring. California accepts the NCEES eight-hour exams for the practice act branches of civil, electrical, and mechanical engineering, the title act engineering branches, except for traffic, for which there is no national NCEES examination, and the 6-hour examination for land surveying. Civil engineering applicants must also pass the California Seismic Principles and Engineering Surveying exams, which both are mandated by statute. Land surveying applicants must pass the California State-Specific Professional Land Surveying examination, as required by statute. If the home state has waived the EIT or LSIT examination, the application is evaluated to see if the home state's waiver matches California's waiver requirements; if not, the applicant must pass the EIT or LSIT examination or have 14-17 years of experience.

California statutes do not provide for comity for applicants who are registered in another country. Applicants from foreign countries are required to submit the same application as first time California applicants and pass all required examinations.

## **ENFORCEMENT PROGRAM**

The Enforcement Unit of the Board is responsible not only for the investigation of complaints but also for all inquiries (telephone, e-mail, fax, letter) regarding the complaint investigation process and how to file a complaint; the status of licenses, especially related to previous complaints and disciplinary actions; and the laws and regulations relating to the practices of professional engineering and land surveying. In general, the only inquiries that are not handled by the Enforcement Unit are those that involve the application/examination/licensure process. The inquiries handled by the Enforcement Unit can range from the simple – is a person licensed and have there been any complaints against him – to the complex – does a certain action constitute professional practice. The inquiries come from the licensees and the local agencies, such as Building Departments and County Surveyors' Offices, as well as from the public/consumers. The Enforcement Unit staff is responsible for responding to all inquiries directly or for referring them to the appropriate person (e.g., the Board's staff engineers and land surveyor or legal counsel) and ensuring that a response is provided. Additionally, the Enforcement Unit is also responsible for all enforcement-related legislative and regulatory (rulemaking) proposals, such as requiring licensees to use written contracts through statute and adopting Codes of Professional Conduct regulations.

In the past, the Enforcement Unit was comprised of 8 full-time positions – 1 program manager (who also oversaw the Board's Legislative Program that included a part-time analyst position); 1 website/publications position responsible for updating, maintaining, and expanding the Board's website and for all of the Board's publications, including the Bulletin of Board News and Enforcement Actions that the Board published two to three times per year; 1 position that served as the Board's liaison to the Office of the Attorney General for all administrative disciplinary matters (including probation monitoring) and was the liaison to the Board's Enforcement Committee; 4 full-time and 1 part-time analyst positions responsible for investigating complaints, responding to inquiries, and coordinating the Citation Program and the Enforcement Outreach Program; and 1 full-time clerical support position. The Enforcement Unit is now comprised of 5 full-time positions and 2 part-time positions – the program manager (who is now entirely responsible for the Board's Legislative Program); 1 full-time position that serves as the liaison to the AG's Office and the Board's Enforcement Committee, maintains the Board's website and publications, and handles complaint investigations and inquiries; 3 full-time and 1 part-time analyst positions who are responsible for investigating complaints, responding to inquiries, and coordinating the Citation Program and the Enforcement Outreach Program; and 1 part-time clerical support position. The reduction in staffing in the Enforcement Unit is due to the current State budget situation and mandatory constraints, including the hiring freeze and the required reduction in personnel costs.

Concurrent with the loss of staff positions in the Enforcement Unit, the Board has been receiving more complaints, thereby increasing the workload of the already over-

burdened staff. In FY 1999/2000, each analyst handled an average of 46 complaint investigation cases; in FY 2002/03, each analyst handled an average of 102 cases. Because of this increase in workload and decrease in staffing, the Board's complaint investigation cases are aging rapidly. The Board's goal is to have fewer than 10% of its pending cases over one year old; at the end of FY 2002/03, 46% of the pending cases were over one year old.

The complaints received by the Board are often complex due to the technical nature of the engineering and land surveying professions. The Enforcement Unit must obtain evidence from all of the parties involved and then secure the services of an independent technical expert to review all of the evidence and provide an opinion as to whether or not the subject has violated the laws in his or her professional practice. Technical experts are licensees of the Board who are independently employed and who assist the Enforcement Unit in reviewing the technical aspects of cases. Since the technical experts are independently employed, there are often times when their own workload does not allow them to work on the Board's cases. The Enforcement Unit maintains a pool of technical experts from which it selects the most appropriate expert for a case, based on the nature of the work involved as well as the location of the project. There are times when the Enforcement Unit has difficulty finding a technical expert who has the specific expertise and knowledge required for a case as well as the time to review the case. This also contributes to the aging of the complaint investigation cases.

Another factor that has contributed to the increasing backlog of enforcement complaint cases is the effect that the budget crisis and hiring freeze have had on the Division of Investigation (DOI). DOI assists the Enforcement Unit staff with the investigation of some of the Board's complaint cases, especially those involving allegations of unlicensed practice. Due to the current State budget crisis, DOI has been unable to fill all of its vacant positions and has had to consolidate some of its regional offices throughout the state. This has caused delays in DOI's ability to timely investigate all of the complaints that are referred to it from the various boards and bureaus within DCA. DOI has had to prioritize its workload and focus its investigators on those cases in which there is an immediate threat to the public health, safety, and welfare. There is generally not an immediate threat to the public health, safety, and welfare in engineering and land surveying cases; therefore, DOI does not give this Board's cases a high priority. Although this Board refers only a small portion of its complaint cases to DOI, the inability of DOI to timely investigate these cases has contributed to the overall aging of the Board's complaint investigation cases.

The most recent trend that the Board is facing with its complaints is the lack of supporting information provided with the complaint itself. Before a complaint investigation case is initiated, the Enforcement Unit staff reviews the information submitted with the complaint to determine if there is sufficient supporting documentary evidence provided to determine if the allegations – if true – would constitute a violation of the laws under the Board's jurisdiction. Without this initial information, a complaint investigation case cannot be started. If sufficient information is not provided with the complaint, the Enforcement Unit must contact the complainant and request that

additional information be provided before proceeding with the investigation. This can be very time-consuming, as well as delaying the investigation, which can be a detriment to both the consumer and the licensee. It appears that with more frequency the complainants are obtaining the complaint form from the Board's website rather than contacting the Board. They are simply filling out the form and sending it to the Board without reading the instructions with the form about what additional information they need to submit with the complaint form thus causing extra delay in the processing of the complaint.

The Board does not require local agencies or its licensees to report suspected violations. Additionally, licensees are not required to report any civil settlements or judgments to the Board. The Board did sponsor legislation several years ago that would have imposed a requirement on licensees to report civil settlements and judgments; however, that language was ultimately removed from the legislation.

The majority of the Board's administrative disciplinary (accusation) cases are resolved through settlement, rather than proceeding to hearing. At this time, the Board does not have any major concerns with the handling of its cases by the Office of the Attorney General; the cases are either processed in a timely manner or there are valid reasons for the delays.



### **Statistical Overview Of Enforcement Program**

<b>ENFORCEMENT DATA</b>	<b>FY 1999/2000</b>	<b>FY 2000/01</b>	<b>FY 2001/02</b>	<b>FY 2002/03</b>
<b>Complaints Opened</b>	Total: <b>249</b>	Total: <b>259</b>	Total: <b>328</b>	Total: <b>302</b>
<b>Complaints Opened (by Source)</b>				
Public (consumer)	148	113	124	132
Profession/Licensees	10	20	43	40
Government/Law Enforcement	17	28	45	37
Other/Internal	74	88	116	93
<b>Complaints Opened (By Type) <sup>1</sup></b>				
Unlicensed Activity	61	67	86	81
Competence/Negligence	110	87	119	100
Contractual	26	33	46	61
Fraud	11	17	24	23
Record of Survey	21	25	38	38
Examination Subversion	35	29	64	52
Other	6	10	4	17
<b>Complaints Pending</b>	Total: <b>206</b>	Total: <b>262</b>	Total: <b>323</b>	Total: <b>408</b>
Complaints at the Division of Investigation (DOI) (subset of Complaints Pending)	31	40	58	28
<b>Complaints Closed</b>	Total: <b>212</b>	Total: <b>203</b>	Total: <b>265</b>	Total: <b>218</b>
<b>Complaint Closed by Category</b>				
No Violation/Insufficient Evidence	49	70	70	50
Compliance Obtained/Resolved	79	51	86	90
Cease & Desist/Warning Letter	7	8	9	9
Mediated	7	5	3	2
Citation to be Issued <sup>2</sup>	19	30	43	26
Referred for Criminal Action <sup>3</sup>	8	6	6	13
Referred to AG's Office <sup>4</sup>	37	29	19	26
Other <sup>5</sup>	6	4	29	8
<b>Final Citations</b>	<b>13</b>	<b>12</b>	<b>24</b>	<b>22</b>
<b>Accusation Cases</b>				
Submitted to AG's Office <sup>5</sup>	37	29	19	16
Accusations Filed	19	15	29	12
Accusations Withdrawn after Filing	1	0	5	2
Accusations Dismissed	3	0	0	0
<b>Disciplinary Decisions (by type)</b>	Total: <b>22</b>	Total: <b>13</b>	Total: <b>18</b>	Total: <b>13</b>
Default Decisions	4	0	2	3
Stipulated Settlements	12	6	13	8
Proposed Decisions (PD)	4	5	3	2
Decision After Non-Adoption/Reduced PD	2	1	0	0
Decision After Reconsideration	0	1	0	0
<b>Disciplinary Orders</b>	Total: <b>19</b>	Total: <b>13</b>	Total: <b>18</b>	Total: <b>13</b>
Probation	12	8	8	10
License Suspension Only	0	0	1	0
License Revocation/Surrender	4	3	4	3
Other <sup>6</sup>	3	2	5	0

(See annotations on next page)

### **Enforcement Data Table Annotations:**

It is rare that a complaint will be opened, submitted to DOI, closed, have a citation issued or an accusation filed, and have disciplinary action taken all in the same fiscal year.

1. Complaints can be opened under more than one "type"; therefore, adding up the various types under "Complaints Opened (By Type)" will result in an erroneous "total."
2. "Citation to be Issued" indicates the number of cases closed so that a citation could be issued. Multiple cases against the same person can be combined into one citation.
3. "Referred for Criminal Action" indicates those complaints submitted to the District Attorney's Office for the filing of criminal charges; it does not indicate whether or not the District Attorney actually filed charges.
4. "Referred to AG's Office" indicates the number of complaint cases that were closed to be referred to the AG's Office for the filing of an Accusation. "Submitted to the AG's Office" indicates the number of cases submitted to the AG's Office for either the filing of an Accusation or a Petition to Revoke Probation; the term "Accusations" as used in this Section also includes Petitions to Revoke Probation. Multiple complaint cases against the same individual are combined into one Accusation case when referred to the AG's Office; therefore the number of complaint cases closed as "referred to the AG's Office" will not always equal the number of Accusation cases "submitted to the AG's Office."
5. The Complaint Closing Category "Other" includes such things as non-cooperation of complainant, subject deceased, unable to locate subject, and unactionable violation (e.g., an examination subversion case where criminal charges are not filed and a citation cannot be issued).
6. "Other" disciplinary actions include such orders as the Board accepting the surrender of a Civil Engineer license which authorized the practice of land surveying and issuing a new Civil Engineer license that does not authorize the practice of land surveying; reproof; or withdrawing the Accusation and issuing a citation instead.

### **Case Aging Statistical Data**

<b>AGING OF PENDING COMPLAINT INVESTIGATION CASES</b> (includes time at DOI and expert, if applicable)				
	<b>FY 1999/2000</b>	<b>FY 2000/01</b>	<b>FY 2001/02</b>	<b>FY 2002/03</b>
1-30 days	10	21	19	25
31-60 days	22	31	24	33
61-90 days	26	11	28	34
91-120 days	19	32	10	14
121-180 days	36	13	22	31
181-270 days	38	40	58	33
271-365 days	13	31	49	49
Over 365 days	42	83	113	189
<b>TOTAL PENDING CASES</b>	<b>206</b>	<b>262</b>	<b>323</b>	<b>408</b>
<b>PERCENT OVER 180 DAYS</b>	<b>45%</b>	<b>59%</b>	<b>68%</b>	<b>66%</b>
<b>PERCENT OVER 365 DAYS</b>	<b>20%</b>	<b>32%</b>	<b>35%</b>	<b>46%</b>

<b>AVERAGE AGE OF PENDING COMPLAINT INVESTIGATION CASES</b> (includes time at DOI and expert, if applicable)				
	<b>FY 1999/2000</b>	<b>FY 2000/01</b>	<b>FY 2001/02</b>	<b>FY 2002/03</b>
<b>AVERAGE AGE OF PENDING CASES IN DAYS</b>	<b>231</b>	<b>269</b>	<b>328</b>	<b>386</b>

<b>INVESTIGATIONS CLOSED WITHIN:</b>	<b>FY 1999/00</b>	<b>FY 2000/01</b>	<b>FY 2001/02</b>	<b>FY 2002/03</b>	<b>AVERAGE % OF CASES CLOSED</b>
90 Days	49	36	65	54	23%
180 Days	47	50	77	35	23%
1 Year	54	46	51	49	22%
2 Years	62	53	58	39	24%
3 Years	0	18	13	33	7%
Over 3 Years	0	0	1	8	1%
<b>Total Cases Closed</b>	<b>212</b>	<b>203</b>	<b>265</b>	<b>218</b>	

<b>AGING OF CASES AT THE ATTORNEY GENERAL'S OFFICE</b>									
<b>Pre- and Post-Accusation Filing *</b>	<b>FY 1999/2000</b>		<b>FY 2000/01</b>		<b>FY 2001/02</b>		<b>FY2002/03</b>		
	<b>Pre</b>	<b>Post</b>	<b>Pre</b>	<b>Post</b>	<b>Pre</b>	<b>Post</b>	<b>Pre</b>	<b>Post</b>	
0-91 days	7	3	12	2	3	3	7	6	
92-182 days	0	4	2	5	0	13	0	0	
183-274 days	3	1	5	3	0	4	2	2	
275-365 days	0	0	0	1	3	5	0	1	
1-2 years	1	2	2	0	2	3	1	4	
2-3 years	1	1	0	1	0	0	1	1	
Over 3 years	0	2	1	2	1	0	0	0	

- Pre-Accusation reflects cases in which an Accusation has not yet been filed. Post-Accusation reflects cases in which the Accusation has been filed. Pre-Accusation is calculated from the date the case is submitted to the AG's Office to June 30; Post-Accusation is calculated from the date the Accusation is filed to June 30.

### **Citation Program Overview And Statistical Data**

The Board can issue administrative citations to both licensed and unlicensed individuals. The citations may contain an order of abatement and an order to pay an administrative fine to the Board in the maximum amount of \$2,500 per violation. The Board publicizes final citations by printing articles about them in its newsletters and by posting the information on its website.

Citations can be issued to unlicensed individuals when the investigation reveals that the unlicensed person violated the Professional Engineers Act or Professional Land Surveyors' Act. While it can be a criminal act for an unlicensed person to offer or practice engineering or land surveying, many District Attorneys' Offices are reluctant to expend their resources on what they consider to be minor, administrative violations. In addition, there is a one-year statute of limitations on the filing of criminal misdemeanor charges. In order for one of the Board's cases to be submitted to the District Attorney (DA) for consideration of criminal prosecution, the case must be investigated by the Division of Investigation (DOI), rather than by the Enforcement Unit staff.

In the past, the Enforcement Unit would refer all unlicensed cases to DOI for investigation and submittal to the DA in the hopes that criminal charges would be filed; if charges were not filed, then an administrative citation would be issued. In the vast majority of the cases, the DA would decline to file charges due to limited resources or the statute of limitations would have expired. It was only after a decision was made by the DA to not file charges that an administrative citation would be issued. Because this process was causing considerable delays in the case investigations and was not resulting in many criminal charges being filed, the Enforcement Unit changed its procedures in unlicensed cases. If review by the Enforcement Unit staff indicated that the unlicensed violations were not egregious or pervasive, then a citation would be issued immediately rather than referring the case to DOI and waiting to see if the DA would file charges. If the violations appeared too egregious or pervasive, then the case would be referred to DOI. This method has helped to speed up the investigation of unlicensed cases.

Citations are issued to discipline licensees who have violated the laws but are not deemed to be a threat to the health and safety of the general public. For example, many of the land surveying complaints investigated by the Enforcement Unit involve the failure of the licensee to file a record of survey or corner record with the County Surveyor's Office in the time and manner required by law. A citation can be issued to the licensee ordering him or her to file the required record, as well as to pay an administrative fine to the Board. By issuing the citation ordering the licensee to comply with the law, the Board is ensuring that the public is protected by the maintenance of the public records of lands. The issuance of a citation also gives the Board the authority to enforce compliance from the licensee, because a failure to comply with a citation order can lead to further – and more serious – disciplinary action against the licensee. Prior to the implementation of the citation program, minor violations of law were handled by the issuance of a letter from the Enforcement Unit advising the licensee that continued

violations could result in disciplinary action taken against the license. The Board's issuance of the citation serves as a reminder to the licensee and other licensees that he or she must follow the laws and regulations under which he is granted his license and that there are professional and monetary consequences if he or she does not.

After working with the citation program for a few years, changes were needed to eliminate confusing elements in the regulations and provide the affected parties with more information concerning the citation process. The Board believes that the regulatory changes adopted on January 1, 2000, have made the citation program a more effective enforcement tool which gives the Board more authority over both licensed and unlicensed individuals while providing the cited persons with additional, and more clearly stated, rights. The following is a summary of the changes and the benefits that have resulted from them:

- The biggest change to the citation regulations, and one which has increased the overall effectiveness of the citation process, is that citations may now contain both an order of abatement and an administrative fine. In unlicensed cases, the citation can order the unlicensed person to pay a fine to the Board for violating the laws and also order the person to cease and desist his or her illegal activity. The revised regulations are also helpful in dealing with licensees as their compliance with the laws can be ordered along with an administrative fine. The fine serves as a deterrent to the cited person and to other individuals who may be practicing in the same manner.
- Another change was the elimination of the range of fines that were associated with specific Sections of law. Eliminating the restrictive ranges of fines while defining the criteria used in determining the amount of a fine has served to provide the subject of a complaint with more information on the reasons for the fine he or she has been assessed and has made the process simpler for staff.
- A third change was to add language to allow the Board's Executive Officer to grant an extension of time to a cited person who, for good cause and/or reasons beyond his or her control, cannot comply with the orders contained in the citation within the 30 days required by the previous regulations. The previous regulations placed undue burden on the cited person which did not further the interest of justice.
- Another change made was to allow the cited person the right to request an administrative hearing after receiving the decision following an informal conference. The previous regulations required the cited person to request an administrative hearing within 30 days of the date of the issuance of the citation – the same time frame in which the informal conference had to be requested – and did not allow for the cited person to file an appeal following the outcome of the informal conference. Many times, the cited person would only request an informal conference, thinking that he or she could later request an administrative hearing.

- Another change added language that stayed the orders, both abatements and fines, during the appeal process. Prior to this change, the language did not address when the cited person was required to comply with the citation while the matter was being appealed.
- The last change expanded the method that the Enforcement Unit can use to serve the citations to include regular mail and personal service in instances when a person is difficult to locate by mail. Previously the only way to service the citation was by certified mail. Certified mail is often not claimed and returned to the Board. Under these new regulations, the Enforcement Unit may use regular mail and personal service to assure that the citations are being properly served.

<b>Unlicensed Citations</b>	<b>FY 1999/00 <sup>1</sup></b>	<b>FY 2000/01</b>	<b>FY 2001/02</b>	<b>FY 2002/03</b>
Final Citations	6	3	14	11
Amount of Fines Assessed	\$6,000	\$4,500	\$14,500	\$11,500
Amount of Fines Collected <sup>2</sup>	\$3,500	\$2,000	\$11,000	\$7,000

<b>Licensed Citations</b>	<b>FY 1999/00 <sup>1</sup></b>	<b>FY 2000/01</b>	<b>FY 2001/02</b>	<b>FY 2002/03</b>
Final Citations	7	12	10	11
Amount of Fines Assessed	\$2,250	\$8,100	\$6,500	\$11,750
Amount of Fines Collected <sup>2</sup>	\$2,250	\$6,850	\$6,500	\$9,000

<sup>1</sup> Citations issued prior to January 1, 2000, could contain only an order of abatement or an administrative fine. In FY 1999/00, 4 of the unlicensed citations and 3 of the licensed citations contained only an order of abatement, and 3 of the licensed citations contained only an order to pay an administrative fine. All citations issued after January 1, 2000, have contained both an order of abatement and an order to pay an administrative fine.

<sup>2</sup> The difference between amount assessed and amount collected is due, in a large part, to fines assessed against unlicensed persons using false identifies who could not be located; therefore, the Board cannot collect the fines.

### **Cost Recovery Efforts**

The Board has not encountered any difficulties in its budgeting for enforcement cases. The Board closely monitors its enforcement expenditures, especially the charges from the Office of the Attorney General and the Office of Administrative Hearings (OAH), to ensure that it has sufficient funds budgeted each year. The Board's cases have not been delayed due to a lack of funds for the Office of the Attorney General or OAH.

The Board has found that it is much more successful in obtaining full recovery of the costs ordered if the respondents/probationers are allowed to make payments to the Board during the period of probation, rather than requiring them to make one payment shortly after the decision becomes effective. If the reimbursement of the costs is ordered as a condition of probation, which it is in the majority of cases, the only recourse the Board has if the respondent/probationer fails to pay is to terminate the probation and either suspend or revoke the license. If the Board does that, then it cannot collect any of the costs. Therefore, while it may take longer for the Board to receive reimbursement of its costs by allowing the respondents/probationers to make

payments, the Board is more successful in obtaining nearly the full amount of cost recovery ordered.

<b>COST RECOVERY DATA</b>	<b>FY 1999/2000</b>	<b>FY 2000/01</b>	<b>FY 2001/02</b>	<b>FY 2002/03</b>
Total Enforcement Expenditures	1,417,865	1,507,512	1,285,445	1,246,015
Total Number of Decisions <sup>1</sup>	18	13	19	13
Number of Decisions Ordering Costs	11	10	12	8
Amount Ordered	\$35,476.33	\$57,713.45	\$70,117.31	\$51,194.36
Amount Collected <sup>2</sup>	\$33,451.33	\$38,395.45	\$36,926.81	\$2,396.00

1 "Total Number of Decisions" represents the total number of decisions issued by the Board during the fiscal year. Cost recovery is not ordered in Default Decisions or when the Accusation is dismissed. Additionally, the Board usually waives recovery of its costs when accepting the voluntary surrender of the license.

2 If reimbursement of the Board's investigative and enforcement costs is ordered as a condition of probation, the subject is given a period of time in which to pay or is allowed to make payments. However, if the subject fails to pay in the time required, it is considered a violation of the probationary order. If the Board orders the probation terminated, all of the conditions including the order to pay reimbursement are also terminated. In some cases, rather than terminate the probationary order, the Board will allow the subject additional time to pay. Additionally, if reimbursement is ordered in a decision which orders the revocation of the subject's license, the reimbursement must only be paid if the license is reinstated. The difference between the amount ordered and the amount collected can be explained as follows:

FY 99/00	\$2,025, failed to timely pay, probation extended
FY 00/01	\$11,318, failed to pay, probation terminated, license revoked (one case)
	\$8,000, allowed to make payments during probation (probation still continuing)
FY 01/02	\$13,450.50, failed to pay, probation terminated, license suspended (one case)
	\$19,740, allowed to make payments during probation (probation still continuing)
FY 02/03	\$49,298.36, allowed to make payments during probation (probation still continuing)

### **Restitution Provided To Consumers**

Pursuant to Government Code Section 11519(b), the Board may order a licensee to pay restitution as a condition of probation. Restitution may not be ordered in a disciplinary decision that does not include probation, unless it is agreed to in a stipulated settlement. Additionally, restitution cannot be ordered through an administrative citation. Through a stipulated settlement, the Board can require that the licensee pay for rework/repairs in lieu of an actual monetary payment. The Board has been very successful in the last four years in ensuring that almost all of the restitution ordered was paid or the required repair work was done to the consumers' satisfaction.

<b>RESTITUTION DATA</b>	<b>FY 1999/2000</b>	<b>FY 2000/01</b>	<b>FY 2001/02</b>	<b>FY 2002/03</b>
Amount Ordered	\$55,465 <sup>1</sup>	\$52,950	\$8,600	\$2,700+ <sup>2</sup>
Amount Paid	\$52,965 <sup>1</sup>	\$52,950	\$8,600	\$2,700 <sup>2</sup>

1 In one case, the respondent/probationer was ordered to pay for the required repairs or to pay the consumer the amount of \$29,675, which was the estimated cost of the repairs; the respondent paid to have the required repairs done. In another case, the respondent/probationer filed bankruptcy and had the restitution (\$2,500.00) discharged through the bankruptcy courts. Therefore, the Board could not charge him with a violation of probation for failing to pay the restitution as ordered in the Board's decision.

2 In one case, the respondent/probationer was ordered to provide proof to the Board that he has paid restitution as ordered by the settlement of the related civil court action; the actual dollar amount was not specified in the Board's decision. The respondent/probationer has until the end of the probationary period to provide this proof to the Board.

## **Results Of Complainant Survey**

The JLSRC directed all boards and committees under review this year to conduct a consumer satisfaction survey to determine the public's views on certain case handling parameters. However, since 1993, the Board has sent a Complaint Survey to the complainant when a complaint has been closed, along with a self-addressed, prepaid postage envelope. The survey is sent with the letter notifying the complainant of the results of the investigation and that the case has been closed. A survey is not sent if there is no named complainant (such as anonymous complaints). If the survey response includes questions or negative comments, the complainant is contacted to clarify concerns and/or answer any questions. For the Fiscal Years 1998/1999 through 2001/2002, the Board sent out 357 surveys and received 53 responses for a 15% response rate. Since the Board began sending out these surveys in 1993, 15% has been the usual rate of response.

<b>1998/1999 – 2001/2002 CONSUMER SATISFACTION SURVEY RESULTS</b>		
<b>QUESTIONS</b>		<b>RESPONSES</b>
# Surveys Mailed: 357		Yes No
# Surveys Returned: 53		
1 Was our representative courteous?	100%	0%
2 Did our representative understand your problem?	100%	0%
3 Was the complaint process explained to you?	94%	6%
4 Were you kept advised of the status of your complaint?	89%	11%
5 Were the reasons for case closure explained to you in a clear and concise manner?	98%	2%
6 Were you satisfied with the results?	81%	19%
7 Even if the matter was not resolved in your favor, do you feel that your case was dealt with in a fair and reasonable manner?	89%	11%

The following are samples of the comments, both negative and positive, received on the Complaint Surveys:

"It took a lot of pushing on my part to get them to go any further. When I wouldn't stop, then they went ahead and enforced the law. Good job!!"

"Due to the amount of time required, the Board should keep the complainant advised every 3 months."

"I feel it was a quick process and that was helpful."

"I think it is very redundant that you can collect over \$4,000.00 for your trouble in settling this case, and I the injured party receive nothing."

"The Enforcement Analyst was extraordinarily helpful in resolving a really frustrating and expensive problem that was becoming ruinous."

"Words cannot express how I appreciate your guidance, protection, and cooperation. I was a 75 year old retired educator with no construction knowledge and the engineer tried to capitalize on my ignorance. You did not allow that to happen. Thank you!"

"Many times I had to call to find out the status."

"I thought the judgment was severe, but then to see what happened to the two people before me, I guess the engineer needed a wake-up call."

"I never had any dealings on this case until I received a subpoena. By then, I had forgotten everything. Luckily, it did not go to court."



### **Complaint Disclosure Policy**

The Board's Policy on Disclosure of Complaints and Disciplinary Actions was formally adopted by the Board in July 1994. Prior to formally adopting a disclosure policy, the Board had an informal policy that followed the same guidelines and principles that were then expressed in the formal policy adopted in 1994. The Board reviews its disclosure policy and updates it as needed. The Board last updated its disclosure policy in September 2002. It is the policy of the Board to provide information to the public regarding complaints and disciplinary actions resulting from violations of the Professional Engineers Act, the Professional Land Surveyors' Act, and the Regulations of the Board. The Board keeps records of complaints for five years. The Board discloses the following information upon request after the completion of an investigation: the number of complaints against the individual; the date the complaint was received; and the disposition of the complaint, such as compliance obtained, mediated/resolved, referred for formal legal and/or disciplinary action, or any other action taken against the subject. If the complaint is still in the investigation stage or if the investigation reveals that there was no violation of the law, no information is disclosed. The Board keeps records of formal disciplinary actions (citations and accusations) and discloses the information as required by law. The information provided includes the action taken, the reasons for the action, and the date of the action. If the matter is final, information regarding compliance with the order is also provided. If the citation or decision on the accusation is not yet final, its procedural status is provided. The Board also publicizes its disciplinary actions by issuing press releases, publishing articles in the Board's newsletter, posting the information on the Board's Internet site, and providing information to other states' regulatory boards. (Attachment 3)

## **CONSUMER OUTREACH, EDUCATION, AND USE OF THE INTERNET**

### **Outreach Programs**

The Board conducts outreach presentations to local agencies, professional societies/associations, the private sector, consumers and college/high school students throughout the state. The purpose of this program is to provide information and educate professionals, students and consumers in the application of the Professional Engineers Act, the Professional Land Surveyors' Act, and engineering and land surveying professions.

The Enforcement Outreach Program includes Board staff attending consumer fairs sponsored by the Department of Consumer Affairs, other governmental agencies, and consumer advocacy agencies in an effort to keep the public informed of the laws and rules related to the practice of professional engineering and professional land surveying. In addition, at the request of professional societies and local governmental agencies, Board staff will attend meetings to discuss any changes in the Professional Engineers or the Professional Land Surveyors' Act, and other topics related to the Board. These outreach meetings also serve to keep the lines of communication open between the Board and local governmental agencies, licensees, and professional associations.

The College Outreach Program provides information regarding career development, initial licensing and examination requirements to college students and professors. Board staff attended college outreach meetings to over fifteen California campuses. In addition, staff has participated in high school career day activities promoting the engineering and land surveying professions.

### **Board Website Information**

The Board maintains its own website at <http://www.dca.ca.gov/pels>. The website contains a vast amount of information for consumers, licensees, and applicants.

General information available on the Board's website that is of interest to consumers, licensees, and applicants includes the Professional Engineers Act, the Professional Land Surveyors' Act, and the Board Rules; the Board's newsletter, *Bulletin of Board News and Enforcement Actions*; notices of Board and Committee meetings; Board meeting minutes; and notices of rulemaking proposals. The website also contains information about how to contact the Board, with several different dedicated e-mail addresses set up for specific questions – such as enforcement issues, license verification requests, and application requests.

Consumers can learn about hiring an engineer or land surveyor by reading the *Board's Consumer Guide*. They can also check on the license status of the person(s) they are considering hiring using the online license lookup feature. The license lookup feature provides information on the Board's licensees including their license numbers, expiration dates, and addresses of record. The license lookup feature also provides links to any disciplinary actions taken against the licensee. Consumers can also find out how to file a complaint with the Board regarding engineering and surveying problems and can obtain a complaint form to file such a complaint.

Licensees can obtain information about any new laws that affect them and their practices. For example, when the Board's new regulations regarding Codes of Professional Conduct were approved at the beginning of June 2003, to become effective on July 4, 2003, information regarding the new regulations and the actual language of the Codes of Professional Conduct were immediately posted on the Board's website; the website pages with that information received 6,400 "hits" in the first three weeks they were posted. Many licensees use the online license lookup feature to verify that the Board has their correct addresses of record; they can then use the Address Change Affidavit form on the website to notify the Board if they need to change their addresses of record.

The applications for certification as an Engineer-in-Training or Land Surveyor-in-Training and for licensure as a Professional Engineer (all disciplines), a Geotechnical Engineer, or a Professional Land Surveyor are all available on the Board's website, along with extensive information regarding the application/licensure requirements and how to complete the applications. The only application not yet available on the website is the Structural Engineer application. The website also provides extensive information regarding the licensing examinations, including reference lists for specific examinations, examination location information, the schedule for approving and releasing examination results, and the pass/fail rate statistics for the examinations given over the last five years. Since the majority of the Board's licensing examinations are national examinations, it is not possible to offer them online. The Board does make available the California Laws and Board Rules examination (also called the "Take Home Examination") on its website; this helps speed up the licensure process because staff can now refer applicants to the website to obtain this examination, rather than mailing it out to the applicants.

The Board receives many of its inquiries via e-mail and, if possible, responds via the same manner, thus decreasing the amount of time it takes to respond to inquiries, as helping to keep the Board's postage expenses down.

Unfortunately, due to the current budgetary constraints, including the hiring freeze, the Board is not able to employ a full-time Webmaster to update, maintain, and expand its website. One of the Enforcement Unit staff has been assigned to maintain the website to ensure that the information available is current. However, with limited staff time available to work on the website, the Board is not able to expand the content of its website, such as finalizing the Structural Engineer application for the website.

### **Online “Practice” Issues**

In recent years, the Board’s Enforcement Unit has been called upon to investigate the way in which professional engineers and land surveyors are advertising their services via the Internet. In general, under the Professional Engineers Act, the Professional Land Surveyors’ Act, and the Board Rules, Internet advertising is really no different than advertising in paper publications, such as magazines or telephone directories. If a professional engineering or land surveying company has a website through which they are offering their professional services, then they must meet all of the same requirements as any other professional engineering or land surveying company that offers services in California. The Board has required companies to make modifications to their websites to ensure that they are in compliance with California’s laws; such as clarifying what services they can perform in California.

### **Computerized Testing**

The National Council of Examiners for Engineers and Surveyors develops 14 examinations utilized in California. The NCEES began discussing Computer Based Testing (CBT) in 1996. In 1999, an oversight committee was formed with its charge to conduct a feasibility study and make a recommendation of whether or not to proceed with a beta test for the EIT and LSIT examinations.

The results of this study indicated that the nature of engineering problems was not conducive to computerized testing at this time. Students were interviewed regarding their preference, and they indicated that they prefer examinations using paper and pencil. They indicated that colleges and universities continue to test knowledge by paper and pencil.

It was also determined that the item banks were also not adequate to begin computer-based testing at this time. The NCEES developed a 10-year plan and is consistently monitoring trends in computerized testing and the status of its item banks.

## PART 2

### BOARD RESPONSES TO THE FINAL RECOMMENDATIONS OF THE JOINT LEGISLATIVE SUNSET REVIEW COMMITTEE AND THE DEPARTMENT OF CONSUMER AFFAIRS

**The Following Recommendations were Adopted by the Joint Legislative Sunset Review Committee on April 11, 2000, by a Vote of 5 to 0:**

**ISSUE #1. (CONTINUE REGULATION OF THE PROFESSION?) Should the licensing and regulation of all branches of engineering and land surveying be continued?**

**JLSRC Comments:** There is a substantial risk of physical harm to the public from faulty engineering and land surveying work. The need to regulate certain branches of engineering in California is particularly evident because natural disasters such as earthquakes and floods are prevalent.

***Recommendation #1: Given the health and safety implications for consumers, the Joint Committee and the Department recommend that the practice areas of civil, electrical, and mechanical engineering and land surveying should continue to be regulated. However, other areas of engineering should be regulated only if there is clear potential for consumer harm.***

**Action taken by the Board:** The Board agrees with the JLSRC recommendation that civil, electrical, and mechanical engineering and land surveying should continue to be regulated. The structural and geotechnical engineering licenses are title authorities, not title acts. They are granted to civil engineers who have demonstrated to the Board their qualifications to use the titles by extended experience and mastery examination. The Board does not plan to make changes to the structural or geotechnical title authorities. The Board is currently working with the JLSRC, DCA, and various engineering professions to determine what title acts should be regulated and how. An in-depth analysis was recently completed by an independent research group focusing on if title acts should be deregulated and which ones, if any, should become practice acts. A task force has been appointed by the Board to review the report and make recommendations to the Board before making its recommendation to the Legislature regarding any recommendations.

**ISSUE #2. (CONTINUE WITH THE BOARD?) Should the Board be continued, or its role be limited to an advisory body and the remaining functions be transferred to the Department?**

**JLSRC Comments:** This is the only Board in this round of sunset review to receive a recommendation for a shortened renewal period. Major unresolved issues dealing with the Board's regulatory authority, such as the need to continue regulation of engineering subspecialties and the scope of practice for the three main branches of engineering, indicate that the Board needs additional legislative oversight.

**Recommendation #2:** *The Joint Committee and the Department recommend that the Board's sunset date should be extended for only two years, to July 1, 2003, because of major unresolved issues dealing with the Board's regulatory authority.*

**Action taken by the Board:** This Board, consisting of practicing engineers and land surveyors and public members, should continue to regulate the practices of professional engineering and land surveying in California.

Public members represent the interests of consumers and provide a balance between consumer interests in public protection and the interests of the professions of engineering and land surveying.

Board members who are registered to practice engineering and land surveying help the public members and staff stay current with and understand innovations in engineering and land surveying. Professional members knowledgeable about structures, soil erosion, bridge and highway design, and mechanical and electrical issues help protect California citizens by providing sound, practical, and immediate advice during periods of disaster, when reviewing enforcement matters, and when making policy decisions.

Both engineering and land surveying are highly technical, and the professional members of the Board bring a level of knowledge that would be unavailable in a bureau setting. Furthermore, the Board provides a means of communication with its various stakeholders by conducting meetings in a public forum.

**ISSUE #3. (SHOULD THE DEPARTMENT CONDUCT AN INDEPENDENT REVIEW OF TITLE ACT REGULATION?)** There is still a need to conduct a more comprehensive analysis of whether certain title acts for specified branches of engineering should be eliminated or converted to practice acts similar to civil, electrical, and mechanical engineering, and whether supplemental engineering work should be permitted in other branches of engineering.

**JLSRC Comments:** Various attempts by the Board and the Legislature to review the need for regulation of engineering subspecialties have not been successful. The initial sunset review of the Board recommended that it conduct a thorough analysis of the title act system. This resulted in the elimination of only three out of thirteen title acts (corrosion, quality, and safety). Attempts at eliminating regulation of traffic engineers failed due in part to the Legislature's acceptance of the argument that deregulation could endanger highway safety.

Both the Joint Committee and the Department have consistently recommended that the Board conduct a more thorough analysis of the remaining title acts that potentially could be eliminated and *clearly demonstrate why a title act should be continued*. However, the Board has not fully responded to this recommendation and failed to consider some of the recommended criteria for evaluating the ten remaining title act disciplines. Because of the controversy over deregulation, the Department anticipates that the remaining title acts will stand for the next two years. In the interim, the Department has recommended that it be responsible for reviewing title act registration.

Another issue unresolved is the extent to which supplemental engineering work should be permitted for all branches of engineering. Standard industry practices allow for overlapping engineering work on any given project. However, the Board only allows civil engineers to perform overlapping or supplemental work from other branches of engineering. Specifically, existing law allows civil engineers to perform supplemental work provided that the work is supplementary to or in connection with civil engineering work. There is no similar law for other branches of engineering. The result is inequitable treatment of other branches of engineering and inconsistent interpretations of overlap of scope of practice between similar or related engineering disciplines.

[The Board agreed to hire a consultant to perform an in-depth analysis of the title acts, specifically focusing on which ones should be deregulated and which one should become practice acts. The Board continues to believe strongly that the current method of only restricting title but not the practice does little, if anything, to protect the citizens of California.]

**Recommendation #3:** *The Joint Committee and the Department recommend that the Department should be responsible for reviewing title act registration. There should be a Board-funded contract with an independent consulting firm to perform an objective analysis of title act registration. Additionally, the analysis*

***should consider the extent to which supplemental engineering work should be permitted for all branches of engineering.***

**Action taken by the Board:** The issue of the Title Acts and what should be done about them has long been a concern of the Board and the JLSRC. How does restricting who may use a title but not restricting who may practice the work protect the public? Should the existing Title Acts be continued in their current state, should they be deregulated entirely, or should they be converted to Practice Acts, where both the title and the practice would be restricted? These are questions that the Board and the Legislature have struggled with for several years. The JLSRC, the Board, and DCA decided that the best way to address this issue was to contract with an independent consultant to perform a review of all of the Title Act branches. Senate Bill 2030 mandated that an independent research group conduct an in-depth analysis of the Title Acts, by adding Section 6704.1 to the Business and Professions Code. This section required DCA to hire the consultant, with the Board paying for the study (\$300,000), specifically focusing on which “titles” should be deregulated and which ones, if any, should become practice acts. The California State University Sacramento Institute for Social Research (ISR) was hired and oversight was provided by DCA; the report was completed in November 2002. A task force has been appointed by the Board consisting of two members of the Board, Committee Consultants of the Legislature, a representative from DCA, and other various members of the public and two engineers not affiliated with the Board. The task force is in the process of taking public comments and reviewing the report.



**ISSUE #4. (SPECIFICALLY DEFINE ELECTRICAL AND MECHANICAL ENGINEERING IN STATUTE?)** The ability of the Board to define the scope of practice for areas of electrical and mechanical engineering is unique and has possibly created more controversy for the Board than any other regulatory power it has. Only the Legislature generally has authority to delineate scope of practice for licensed professions.

**JLSRC Comments:** Generally, a specific scope of practice for regulated professions is delineated in statute. However, this Board's statutory definitions for electrical and mechanical engineering are very general and problematic. Specific definitions should be included in statute.

[The Board agreed to sponsor legislation to move the definitions of electrical and mechanical engineering from regulation into statute, as recommended by the Joint Committee and the Department. They also scheduled public hearings to review the current definitions.]

***Recommendation #4: To eliminate confusion over the scope of practice for the two main branches of electrical and mechanical engineering, the Joint Committee and the Department recommend that the regulatory definitions of electrical and mechanical engineering should be established in statute.***

**Action taken by the Board:** A JLSRC bill, Senate Bill 2030 (Chapter 1006, Statutes of 2000), was the vehicle the Board used to place the definitions of electrical and mechanical engineering into statute and to update the current definitions. The new definitions clarify what these branches of engineering encompass as well as provide guidelines for engineering applicants when gaining experience to qualify to take the professional licensing examinations.

**ISSUE #5. (SHOULD THE BOARD ADOPT A CODE OF PROFESSIONAL CONDUCT?)** This Board has not, as yet, adopted a code of professional conduct for the engineering profession. There has been criticism of the Board for not pursuing these professional standards for the practice of engineering. There are currently a number of states that have adopted professional standards of practice for engineers, and the National Council of Examiners and Engineers and Surveyors (NCEES) has recommended adoption of model standards. All other design and construction boards under the Department also utilize a code of professional conduct.

**JLSRC Comments:** Almost all the boards under the Department, particularly those governing the design and construction industries, utilize a code of professional conduct as a basis for disciplining licensees. However, this Board has not adopted a code of professional conduct. Codes of professional conduct allow licensing boards to take disciplinary action against their licensees for fraud, deceit, misrepresentation, negligence, incompetence, breach of contract, and aiding/abetting another to violate the law. Specifically, this authority has proven to be an effective tool against false advertising and illegal contracting practices. Therefore, the Department concurs with the Joint Committee recommendation that the Board should seek statutory authority to adopt a code of professional conduct.

[The Board recently indicated that it has introduced legislation to adopt a code of professional conduct.]

***Recommendation #5: The Joint Committee and the Department recommend that the Board should seek statutory authority to adopt a professional code of conduct and ethics for the practice of engineering.***

**Action taken by the Board:** The Board sponsored AB 2629 (Cox) (Chapter 976, Statutes of 2000). One of the reasons for this bill was to place language into statute to allow the Board to adopt rules and regulations of professional conduct for professional engineers and land surveyors. After conducting thorough research of the Codes of Conduct of other states' engineering and surveying professions and other professions in California, the Board then conducted numerous public meetings to solicit comments from the profession and the public regarding what should be included in the Codes of Professional Conduct. The Board received and considered numerous comments before adopting the Codes of Professional Conduct for Professional Engineers and Land Surveyors into its Board Rules. Sections 475 and 476 were added to Title 16 of the California Code of Regulations, effective July 4, 2003. The actual language of these sections follows:

**475. Code of Professional Conduct – Professional Engineering**

To protect and safeguard the health, safety, welfare, and property of the public, every person who is licensed by the Board as a professional engineer, including licensees employed in any manner by a governmental entity or in private practice, shall comply with this Code of Professional Conduct. A violation of this Code of Professional Conduct in the practice of professional engineering constitutes

unprofessional conduct and is grounds for disciplinary action pursuant to Section 6775 of the Code. This Code of Professional Conduct shall be used for the sole purpose of investigating complaints and making findings thereon under Section 6775 of the Code.

(a) Compliance with Laws Applicable to a Project:

A licensee shall provide professional services for a project in a manner that is consistent with the laws, codes, ordinances, rules, and regulations applicable to that project. A licensee may obtain and rely upon the advice of other professionals (e.g., architects, attorneys, professional engineers, professional land surveyors, and other qualified persons) as to the intent and meaning of such laws, codes, and regulations.

(b) Conflict of Interest:

(1) If a licensee provides professional services for two or more clients on a project or related projects, the licensee shall disclose in writing to those clients and property owners or their authorized representatives his or her relationship to those clients.

(2) If a licensee has a business association or a financial interest which may influence his or her judgment in connection with the performance of professional services, the licensee shall fully disclose in writing to his or her client(s) or employer(s) the nature of the business association or the financial interest.

(3) A licensee shall not solicit or accept payments, rebates, refunds, or commissions, whether in the form of money or otherwise, from contractors or suppliers of material, systems, or equipment in return for specifying their products to a client or employer of the licensee.

(4) A licensee, while engaged by a governmental agency as an officer, employee, appointee, agent, or consultant of that agency shall not engage in a professional engineering business or activity that may be subject to that licensee's direct or indirect control, inspection, review, audit, or enforcement on behalf of that agency, unless the circumstances are disclosed to and approved by that agency in writing prior to such engagement.

(c) Representations:

(1) A licensee shall not misrepresent his or her qualifications to a prospective or existing client or employer.

(2) A licensee shall not misrepresent to a prospective or existing client the licensee's scope of responsibility in connection with projects or services for which the licensee is receiving or will receive compensation from that client.

(3) A licensee shall not misrepresent his or her scope of responsibility in connection with projects or services for which the licensee is claiming credit.

(4) A licensee shall not misrepresent nor permit the misrepresentation of his or her professional qualifications, or affiliations or the affiliations or purposes of the institutions, organizations, or other businesses with which he or she is associated.

(5) When providing information in connection with a person's application for a license to practice professional engineering, a licensee shall accurately represent his or her knowledge of the applicant's qualifications.

(6) A licensee may advertise or solicit for any services for which he or she is authorized by licensure.

(7) A licensee shall only express professional opinions that have a basis in fact or experience or accepted engineering principles.

(8) A licensee shall attribute proper credit to others for their professional work or professional contribution and shall not misappropriate the professional work of others.

(9) A licensee shall not knowingly permit the publication or use of his or her data, reports, plans, or other professional documents for unlawful purposes.

(10) A licensee shall not falsely or maliciously injure or attempt to injure the reputation or business of others.

(11) A licensee shall not misrepresent data and/or its relative significance in any professional engineering report.

(d) Confidential Information:

Confidential information obtained by a licensee, in his or her professional capacity, concerning a client, employer, or other related party shall not be disclosed by the licensee without the permission of the client, employer, or other related party except for the following:

- (1) Disclosures made in response to an order of the court or to a subpoena or summons enforceable by an order of the court.
- (2) Disclosures made in an adjudicatory proceeding.
- (3) Disclosures made in response to an official inquiry from a governmental regulatory agency.
- (4) Disclosures made when required by law.
- (5) Disclosures made upon discovering a hazard within the licensee's field of professional expertise which may threaten the health, safety, and welfare of the public.
- (6) Disclosures made when providing evidence to the Board regarding other licensees or unlicensed individuals who may have violated the Professional Engineers Act.
- (7) Disclosures made regarding illegal conduct.

As used in this section, "confidential information" means information identified as confidential by the licensee's client, employer, or other related party.

(e) Document Submittal:

- (1) A licensee shall not misrepresent the completeness of the professional documents he or she submits to a governmental agency.
- (2) A licensee shall not misrepresent the completeness of the professional documents he or she prepared to his or her client or to other involved parties.

#### **476. Code of Professional Conduct – Professional Land Surveying**

To protect and safeguard the health, safety, welfare, and property of the public, every person who is licensed by the Board as a professional land surveyor or professional civil engineer legally authorized to practice land surveying, including licensees employed in any manner by a governmental entity or in private practice, shall comply with this Code of Professional Conduct. A violation of this Code of Professional Conduct in the practice of professional land surveying constitutes unprofessional conduct and is grounds for disciplinary action pursuant to Section 8780 of the Code. This Code of Professional Conduct shall be used for the sole purpose of investigating complaints and making findings thereon under Section 8780 of the Code.

(a) Compliance with Laws Applicable to a Project:

A licensee shall provide professional services for a project in a manner that is consistent with the laws, codes, ordinances, rules, and regulations applicable to that project. A licensee may obtain and rely upon the advice of other professionals (e.g., architects, attorneys, professional engineers, professional land surveyors, and other qualified persons) as to the intent and meaning of such laws, codes, and regulations.

(b) Conflict of Interest:

(1) If a licensee provides professional services for two or more clients on a project or related projects, the licensee shall disclose in writing to those clients and property owners or their authorized representatives his or her relationship to those clients.

(2) If a licensee has a business association or a financial interest which may influence his or her judgment in connection with the performance of professional services, the licensee shall fully disclose in writing to his or her client(s) or employer(s) the nature of the business association or the financial interest.

(3) A licensee shall not solicit or accept payments, rebates, refunds, or commissions, whether in the form of money or otherwise, from contractors or suppliers of material, systems, or equipment in return for specifying their products to a client or employer of the licensee.

(4) A licensee, while engaged by a governmental agency as an officer, employee, appointee, agent, or consultant of that agency shall not engage in a professional land surveying business or activity that may be subject to that licensee's direct or indirect control, inspection, review, audit, or enforcement on behalf of that agency, unless the circumstances are disclosed to and approved by that agency in writing prior to such engagement.

(c) Representations:

(1) A licensee shall not misrepresent his or her qualifications to a prospective or existing client or employer.

(2) A licensee shall not misrepresent to a prospective or existing client the licensee's scope of responsibility in connection with projects or services for which the licensee is receiving or will receive compensation from that client.

(3) A licensee shall not misrepresent his or her scope of responsibility in connection with projects or services for which the licensee is claiming credit.

(4) A licensee shall not misrepresent nor permit the misrepresentation of his or her professional qualifications, or affiliations or the affiliations or purposes of the institutions, organizations, or other businesses with which he or she is associated.

(5) When providing information in connection with a person's application for a license to practice professional land surveying, a licensee shall accurately represent his or her knowledge of the applicant's qualifications.

(6) A licensee may advertise or solicit for any services for which he or she is authorized by licensure.

(7) A licensee shall only express professional opinions that have a basis in fact or experience or accepted land surveying principles.

(8) A licensee shall attribute proper credit to others for their professional work or professional contribution and shall not misappropriate the professional work of others.

(9) A licensee shall not knowingly permit the publication or use of his or her data, reports, maps, or other professional documents for unlawful purposes.

(10) A licensee shall not falsely or maliciously injure or attempt to injure the reputation or business of others.

(11) A licensee shall not misrepresent data and/or its relative significance in any professional land surveying report.

(d) Confidential Information:

Confidential information obtained by a licensee, in his or her professional capacity, concerning a client, employer, or other related party shall not be disclosed by the licensee without the permission of the client, employer, or other related party except for the following:

(1) Disclosures made in response to an order of the court or to a subpoena or summons enforceable by an order of the court.

(2) Disclosures made in an adjudicatory proceeding.

(3) Disclosures made in response to an official inquiry from a governmental regulatory agency.

(4) Disclosures made when required by law.

(5) Disclosures made upon discovering a hazard within the licensee's field of professional expertise, which may threaten the health, safety, and welfare of the public.

(6) Disclosures made when providing evidence to the Board regarding other licensees or unlicensed individuals who may have violated the Professional Land Surveyors' Act.

(7) Disclosures made regarding illegal conduct.

As used in this section, "confidential information" means information identified as confidential by the licensee's client, employer, or other related party.

(e) Document Submittal:

(1) A licensee shall not misrepresent the completeness of the professional documents he or she submits to a governmental agency.

(2) A licensee shall not misrepresent the completeness of the professional documents he or she prepared to his or her client or to other involved parties.

**ISSUE #6. (SHOULD THE BOARD CEASE PROMULGATING “POLICY RESOLUTIONS?”)** The Board practice of issuing policy resolutions as a method of clarifying existing statutes, regulations, and procedures appears to be legally indefensible. Specifically, these policy resolutions have been considered as “underground” regulations. The Attorney General has advised that if a board needs to clarify any part of applicable law, it should do so only through regulations.

**JLSRC Comments:** The Board practice of issuing policy resolutions as a method of clarifying existing statutes, regulations, and procedures appears to be a violation of law. A 1996 California State Supreme Court decision limits agencies from issuing opinions or procedures without adopting them as regulations. Specifically, these policy resolutions are considered “underground” regulations (regulations adopted without the benefit of the rulemaking process and public comment required by the Administrative Procedures Act). In response, the Board withdrew some of its policy resolutions but several remain in question. As the Joint Committee has noted, it is not clear whether the Board still plans to use policy resolutions to interpret its authorizing statutes and provide opinions concerning areas of practice. However, given a May 1999 Attorney General opinion strongly suggesting that the Board curtail the use of policy resolutions, it is clear that the Board should cease this practice.

[The Board recently indicated that it voted to withdraw all remaining policy resolutions, and that most could be addressed through the regulatory process should the Board determine that the specific issue still needs to be addressed.]

***Recommendation #6: The Joint Committee and the Department recommend that all policy resolutions or other proposals by the Board relating to any aspect of its licensing authority should be codified either as regulations or statutes. This will ensure the Board is not exceeding its authority and bring it into conformity with the practices of other boards.***

**Action taken by the Board:** The intent of the Board in issuing policy resolutions was to provide answers to commonly asked questions about existing statutes, regulations, and procedures. The Board did not intend for the policy resolutions to be treated as “new laws” or to be viewed as binding opinions. They were simply to be restatements of existing laws or the only legally tenable statement of law. These resolutions were drafted after the Board had cleared such procedures through its legal counsel. Based on records of Court decisions on similar opinions and policies of state agencies, the Board’s attorneys gave the opinion that statements of policy did not need to be adopted as formal and binding regulations as long as they (1) are not intended to amend, supplement, or revise any express statute or regulation concerning professionals subject to licensure by the Board; (2) are merely restatements of existing law and are intended only for clarification; (3) are not intended to implement, interpret, or make specific the law enforced or administered by the Board; and (4) are not intended to govern the Board’s procedures. Once the Board was advised of a 1996 California

Supreme Court ruling that narrowed the instances in which an agency may issue opinions or procedures without adopting them as regulations, and at the advice of the Board's attorneys, all policy resolutions were withdrawn.

**ISSUE #7. (SHOULD THERE BE A WRITTEN CONTRACT REQUIREMENT FOR ENGINEERING SERVICES?)** Unlike other design and building trades regulated by the Department, such as architects, home improvement contractors, and landscape architects, there is no written contract requirement for licensed engineers. [The Board recently introduced legislation to adopt a written contract requirement.]

**JLSRC Comments:** Engineering is one of a very few professions that does not require written contracts for the performance of services. Written contracts are an effective legal tool for protecting all parties in complex transactions of a technical nature. All other design and building professionals regulated by the Department, such as architects, home improvement contractors, and landscape architects, have written contract requirements. Written contracts would enhance protection of consumers of engineering services by ensuring fair contracting and billing practices. They also protect engineers by ensuring that both parties understand the essential terms of a professional contract, and by enabling them to enforce an engineer's lien when necessary. Accordingly, the Department supports the Board's efforts to pursue legislation to adopt a written contract requirement for engineers.

**Recommendation #7:** *The Joint Committee and the Department support the Board's efforts to pursue legislation to adopt a written contract requirement for engineers.*

**Action taken by the Board:** The Board sponsored AB 2629 (Cox) (Chapter 976, Statutes of 2000) to add Section 6749 to the Professional Engineers Act and Section 8759 to the Professional Land Surveyors' Act requiring that professional engineering and land surveying services be undertaken only after the execution of a written contract, containing specified terms and conditions. The laws include the following:

**REQUIREMENTS:** The written contract must include, but not be limited to, all of the following:

1. A description of services to be provided by the Professional Engineer or Professional Land Surveyor,
2. A description of any basis of compensation applicable to the contract, and method of payment agreed upon by the parties,
3. The name, address, and license or certificate number of the Professional Engineer or Professional Land Surveyor, and the name and address of the client,
4. A description of the procedure that the Professional Engineer or Professional Land Surveyor and the client will use to accommodate additional services, and
5. A description of the procedure to be used by any party to terminate the contract.

**EXEMPTIONS:** A licensee is not required to use a written contract in the following circumstances:

1. The client will not be compensating the Professional Engineer or Professional Land Surveyor for their services.



2. The Professional Engineer or Professional Land Surveyor has a current or prior contractual relationship with the client to provide professional services, and the client has paid the Professional Engineer or Professional Land Surveyor all of the fees that are due under that contract.
3. The client knowingly states in writing, after full disclosure of this requirement, that a written contract is not needed.
4. Professional services are rendered by a Professional Engineer or Professional Land Surveyor to another Professional Engineer or Professional Land Surveyor; an architect; a contractor; a geologist or geophysicist; a manufacturing, mining, public utility, research and development, or other industrial corporation, if the services are provided in connection with or incidental to the products, systems, or services of that corporation or its affiliates; or a public agency.

**ISSUE #8. (ARE THERE CHANGES NECESSARY TO UPDATE THE BOARD'S LICENSING ACT?)** Although the Board was unable to generate support for its legislation to rewrite the entire Professional Engineers Act, there may still be some changes which should be made to either clarify or update this licensing act, and that are non-controversial. (The Board recently indicated that it has introduced legislation to make "clean-up" amendments to the Professional Engineers Act and the Professional Land Surveyors' Act.)

**JLSRC Comments:** In 1997, the Board introduced legislation to rewrite its entire Professional Engineers Act. The Board, however, was unable to generate any significant support from either the Legislature or the Administration for its proposal. One of the reasons given for the failure of this measure was a lack of understanding and confusion about what the Board was trying to accomplish by rewriting the entire Professional Engineers Act. The measure was seen as too limiting and restrictive on the current practice of engineering in this State. Although the Board claimed that this new licensing scheme would have cleared up the confusion and problems with the current Engineers Act, insufficient evidence was provided to demonstrate that this would be accomplished. There were, however, changes being made to the Act which were non-controversial and both clarified and updated provisions within the Act. Since the Board dropped the entire proposal, these non-controversial changes have not been pursued.

[The Board has indicated that it will be pursuing legislation to make a number of "clean up" amendments to the Professional Engineers Act and the Professional Land Surveyors Act.]

***Recommendation #8: The Joint Committee recommends that the Board should pursue legislation to make "clean up" amendments to the Professional Engineers Act and the Professional Land Surveyors' Act which are non-controversial.***

**Action taken by the Board:** The Board has pursued legislation the past few years to amend and clarify the Professional Engineers Act and the Professional Land Surveyors' Act. The legislation has been contained in bills sponsored by the Board, the JLSRC, and the Senate Business and Professions Committee. Senate Bill 1307 (Senate B&P Committee) (Chapter 983, Statutes of 1999) created a retired status for engineers and land surveyors. The Board then prepared a rulemaking package amending Section 407 of the Board Rules establishing the fee for a retired license (effective April 14, 2001). AB 2629 (Cox) (Chapter 976, Statutes 2000) authorized the Board to adopt rules and regulations of professional conduct that are not inconsistent with state and federal law. The new Codes of Professional Conduct for Professional Engineering and Professional Land Surveying were codified in the Board Rules (475 and 476) and became effective on July 4, 2003.

Senate Bill 2030 (Figueroa) (Chapter 1006, Statutes of 2000) amended numerous sections of the Professional Engineers Act and the Professional Land Surveyors' Act to

make non-controversial, “clean-up” amendments to the laws. The Acts were amended to clarify the requirements for out-of-state businesses with branch offices in California offering engineering and land surveying services; to clarify that the California Laws and Board Rules (“Take Home”) examination was to be based on the Professional Engineers Act, the Professional Land Surveyors’ Act, and the Board Rules; and to clarify the signing and sealing requirements of civil, electrical, and mechanical engineering documents. In addition, sections were added to give the Board the authority to revoke an EIT or LSIT certificate if it is determined that the certificate holder had provided false information on his or her application or had been convicted of a crime substantially related to the professional practice. Finally, the Professional Land Surveyors’ Act was amended to clarify what titles are restricted for use only by licensed land surveyors and to expand the list of actions by unlicensed individuals that constitute violations. Senate Bill 2026 (Senate B&P Committee) (Chapter 1013, Statutes of 2002) amended Sections 6706 and 6788 to extend the “Good Samaritan” immunity and repair fraud penalties to include all declared federal, state, and local emergencies, not just those caused by natural disasters.

**ISSUE #9. (SHOULD THE BOARD ELIMINATE CERTAIN STATE-ONLY EXAMS?)**

It appears as if the Board may be able to provide national examinations for those who wish to practice structural engineering or land surveying, rather than requiring the current state-only examinations. This would improve state reciprocity for engineers who practice in these areas.

**JLSRC Comments:** During the review of this Board in 1996, the Joint Committee questioned whether the Board still needed to provide two state-only examinations. They included the “Structural Engineers” examination and the “Land Surveyors” examination.

California Structural Engineering Examination. For a civil engineer to use the title “structural engineer,” they must pass the state Structural examination. NCEES also provides a national examination for structural engineers. The Joint Committee questioned why the national examination, which would provide for better comity for out-of-state structural engineers, could not be used.

[The Board has reviewed this issue and recently voted to transition to using the NCEES Structural II national examination in conjunction with an 8-hour state-specific examination.]

California Professional Land Surveyors Examination. The Board administers its own examination to land surveyor candidates. Recently the pass rates on this examination have plummeted to 15% in 1993, 8% in 1995, **1.9%** in 1998, and 14.4% in 1999. The NCEES also provides a national examination for land surveyor candidates. In 1998, the pass rate for the national examination was **67.2%**. The Joint Committee questioned once again why the national examination could not be used, which would provide for better comity for out-of-state land surveyors and at least improve the pass rate for land surveyor candidates. Also, 52 member boards of the NCEES use the national land surveying examination.

[The Board has reviewed this issue and recently voted to hire a consultant to compare the national examination with the California examination and to make a recommendation whether or not the Board should use the national examination in conjunction with a state-specific examination while maintaining the appropriate level of consumer protection. The Board hopes to implement the use of the NCEES professional land surveying examination in conjunction with a state-specific examination by the April 2001 examination administration.]

***Recommendation #9: The Joint Committee recommends that a sunset date of December 31, 2004, should be placed on these two state-only examinations allowing the Board sufficient opportunity to transition to using the national examinations. Any state-specific examinations in structural engineering or land surveying should only pertain to the laws, regulations, and practice which are unique to California; they should not duplicate areas of testing provided for in the national examinations.***

**Action taken by the Board:** The Board was legislatively mandated to begin administering the NCEES PLS examination along with a state-specific examination in 2003. The Board is legislatively mandated to administer the NCEES SE II examination along with a state-specific examination in 2004.

The Board offered the NCEES 6-hour PLS examination and a 4-hour state specific examination in April 2003.

The Board is in the process of conducting an occupational analysis to determine the state-specific portion of work to be tested on the state-specific examination for Structural Engineers. The project is on track, and the Board sees no obstacles in administering both the NCEES SE II examination and state-specific examination in October 2004.

**ISSUE #10. (NEED FOR OCCUPATIONAL ANALYSES OF BOARD'S EXAMS?)**

**Not all examinations provided by the Board have had an occupational analyses performed on them within the past five years as recommended by the Department.**

**JLSRC Comments:** Occupational analyses and examination validations are critical components of appropriate and legally defensible licensure programs. Both types of reviews help the state ensure that the standards for entry into professions are consistent with the skills required in those professions. A recent court decision held that in order to protect the civil rights of applicants for professional licensure, examinations used to assess competence must meet the test of "job-relatedness." The court also indicated that if a licensing examination has not been updated and validated within five years, it may not be legally defensible. The Department has also adopted recent policy guidelines so that boards may implement minimum standards requirements for updating and validating their licensing examinations. It was unknown at the time of the November hearing whether all of the examinations provided by the Board are meeting this requirement, and if not, what plans the Board has to update their examinations with an occupational analysis. [The Board has provided a schedule for occupational analysis and test plan update of all examinations provided by both the Board and NCEES. It appears as if all examinations will meet the five-year standard.]

**Recommendation #10:** *The Joint Committee recommends that the Board should assure that all state and national examinations provided by the Board have had an occupational analysis performed on them within the past five years. If they have not, then the Board should immediately implement a schedule for performing a new occupational analysis to meet current legal requirements.*

**Action taken by the Board:** In 1993, the Board adopted a schedule that provides funding for a new occupational analysis and test plan for each Board developed examination every five years. The Board has been attempting to meet this schedule for each examination, and every Board-developed examination has had an occupational analysis and/or subject matter expert review of the test plan completed within the last five years.

Historically, examinations purchased from the National Council of Examiners for Engineering and Surveying (NCEES) have had a longer cycle; however, the California Board has requested that this be shortened to five years. NCEES has been attempting to be compliant with this request. Most of the NCEES examinations have had an occupational analysis and/or subject matter expert review of the test plan completed within the last five years.

A schedule detailing the occupational analyses of the Board's examinations, as excerpted from "Section 139(c) Report – August 2003," follows.

<b>State Specific Examinations</b>	<b>Last Analysis</b>	<b>Next Analysis</b>
Geotechnical	2001	2007
Land Surveyor	2002	2007
Special Civil	1996 (Subject Matter Expert test-plan update 2000)	2003
Structural	1997 (Subject Matter Expert test-plan update 1999)	In Progress
Traffic	1999	2005

<b>National Examinations</b>	<b>Last Analysis</b>	<b>Next Analysis</b>
Engineer-in-Training	1989	2003
Land Surveyor-in-Training	1989 (Subject Matter Expert test-plan update 1999)	2003
Chemical	2002	To Be Determined (TBD)
Civil	1999	2003
Electrical	1999	TBD
Mechanical	1999	TBD
Agricultural	2000	TBD
Control System	2002	TBD
Fire Protection	2002	TBD
Industrial	1989 (Subject Matter Expert test-plan update 1999)	2003
Manufacturing	1999	TBD
Metallurgical	1999	TBD
Nuclear	2003	TBD
Petroleum	1999	2005

**ISSUE #11. (SHOULD THE BOARD SEEK A FEE INCREASE?)** The Board is projected to have a budget deficit by fiscal year 2001/02. Should application, examination and licensee fees be increased to deal with the Board's projected budget deficit?

**JLSRC Comments:** As indicated by the Board, it has considered a number of options to resolve its projected fund deficit. As part of a spending reduction plan, the Board curtailed expenditures in Fiscal Year 1998/99 and projected an approximate savings of \$200,000 per fiscal year thereafter. The Board is now proposing to restructure its fee system, increase both renewal and application/examination fees and change from a quadrennial renewal cycle to a biennial renewal cycle (similar to other boards). These changes should bring the Board's fund reserve up to a solvent level.

**Recommendation #11:** *The Joint Committee recommends that the Board should provide appropriate justification for any fee increases to the Department and the Legislature and assure that the Board has considered all other alternatives to deal with its projected budget deficit. If considered appropriate, then any changes to the fee structure, or increases in fees, should be included in sunset legislation.*

**Action taken by the Board:** SB 136 (Figueroa) (JLSRC omnibus bill) (Chapter 495, Statutes of 2001) amended Sections 6799 and 8805 to increase engineering and land surveying application fees. It also amended Sections 6795 and 8801 to convert the Board's license renewal cycle from every four years to every two years. The Board then, through the rulemaking process, amended Board Rule 407, effective July 1, 2003, to increase the examination application fees.

The new fees are as follows:

Engineer-in-Training:	\$100.00
Professional Engineer (all disciplines):	\$275.00
Geotechnical Engineer:	\$275.00
Structural Engineer:	\$275.00
Land Surveyor-in-Training:	\$100.00
Professional Land Surveyor:	\$275.00

Also effective July 1, 2003, Board Rule 407 was amended to change the renewal cycle from four years to two years and to change the renewal fee to \$150.00. All licenses that expire on or after July 1, 2003, are subject to the new renewal fee and will be renewed for a 2-year period. The renewal fee will decrease to \$100.00 every two years for licenses that expire on or after July 1, 2005.



**ISSUE #12. (CHANGE COMPOSITION OR REQUIREMENTS FOR MEMBERSHIP ON THE BOARD?)** There has been some concern raised that the current professional membership of the board does not adequately represent the engineering profession. That in the past there has been little representation of engineers who work in the public sector.

**Comments:** There are total of 13-members for this Board. There are 7 public members and 6 professional members. The professional members include five licensed professional engineers and one licensed land surveyor. Of the five licensed professional engineers, one must be civil engineer, one an electrical engineer, one a mechanical engineer, one a structural engineer, and one from one of the remaining branches of engineering. Over the years, there has been criticism that the Board has been dominated by those professional engineers who work in the private sector and generally work for engineering firms, and that there was little, if any, representation for a large number of licensed engineers who work for local or state agencies.

**Recommendation #12:** *The Joint Committee recommends that one of the licensed professional engineers of the Board be from a local public agency and another from a state agency.*

**Action taken by the Board:** Among other things, SB 2030 (Figueroa) (Chapter 1006 Statutes of 2000), amended Section 6712 of the Engineers Act to require that one of the professional engineer members of the Board for Professional Engineers and Land Surveyors be from a local public agency and another professional engineer member be from a state agency. Currently, the Board has three licensees from state agencies and one licensee from a local agency. [2 PE members are from a state agency, and the PLS member is also from a state agency.]



## **PART 3**

### **NEW ISSUES IDENTIFIED BY THE BOARD FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS**

#### **The Following are New Issues Identified by the Board to be Addressed During the Sunset Review:**

##### **FIRST NEW ISSUE IDENTIFIED BY THE BOARD – AUTHORITY TO OBTAIN CRIMINAL HISTORY INFORMATION**

The Board for Professional Engineers and Land Surveyors needs to be able to obtain criminal history information for its applicants and licensees. In order to do this, the Board needs to have legislative authority to collect fingerprints from its applicants and licensees and to obtain both state and federal criminal records on its applicants and licensees.

##### **Background and Necessity:**

The Board's applications for in-training certificates and for professional licensure (for both engineering and land surveying) require all applicants to state whether or not they have been convicted of a crime because current law allows the Board to deny certification or licensure if the applicant has been convicted of a crime substantially related to the qualifications, functions, and duties of the professional practice. However, the Board does not have the legal authority to obtain criminal history information to verify if the information provided on the applications is correct. Since the Board has no legal authority to independently verify the truthfulness of an applicant's response, the Board must rely solely on the information provided by the applicant on the applications. This current process does not adequately protect consumers.

Additionally, the Board can take disciplinary action against a licensee if the licensee has been convicted of a crime substantially related to the qualifications, functions, and duties of the professional practice. However, the Board is not able to proactively monitor whether its licensees have been convicted of crimes because it is not able to obtain criminal history information directly. The Board must wait for someone to submit a complaint and provide the conviction information. Again, this current process does not adequately protect consumers.

When the Board discussed seeking the legislative authority to obtain criminal history information for its applicants and licensees, some of the Board's licensees questioned why that would be necessary and was there really a problem that would justify doing this. Professional Engineers and Professional Land Surveyors have the right to go onto a person's property – without the person's consent – in order to conduct professional engineering and professional land surveying. Even without that allowance, there are many times when professional engineers and professional land surveyors are requested by consumers to go into the consumers' homes or businesses or go onto the consumers' properties in order to perform professional engineering and professional land surveying services. Without the ability to obtain criminal history information on its applicants and licensees, the Board is not able to fully meet its legislative mandate to safeguard the life, health, property, and public welfare of California's consumers of professional engineering and land surveying services.

The following are two examples of recent situations in which the Board has been forced into a reactive, rather than proactive, response due to its inability to directly obtain criminal history information.

A Civil Engineer who worked as a plan checker in the building permit department of a major city was convicted of soliciting bribes from consumers. He would tell consumers that for a certain amount of money paid directly to him, he could expedite the permit process for them. In fact, it would cost far less for the consumers to simply pay the city's fee for expedited processing. The Civil Engineer was convicted of soliciting bribes and was sentenced to criminal probation. Because the Board does not have the authority to directly obtain criminal records information on its licensees, the Board did not learn of this until a complaint was filed regarding the matter.

Several years ago, the Board conducted an investigation of an unlicensed person offering land surveying services. This investigation led to a criminal conviction against the unlicensed person. The Board then received evidence that he had practicing land surveying without a license while on criminal probation. This led to further criminal convictions against him, including some that did not directly involve the practice of land surveying. The Board used these convictions to deny licensure as a land surveyor to this person because the Board did not believe such a person should be given a license that would allow him unfettered access to people's properties. In early 2002, this person submitted a new application for licensure to the Board, as is his right under the laws. On the application, the person listed the previous convictions that the Board was aware of and also listed a new conviction for "making terrorist threats." In light of the timing of this, the Board was very concerned about this new conviction and attempted to independently obtain the full criminal history of this applicant. However, the Board was told that it could not obtain those records because it did not have the legislative authority to

obtain criminal history information. It was only through the diligent investigation conducted by its enforcement staff that the Board was able to find out about not only the specific conviction the applicant had listed, but several other convictions he had failed to disclose on the application. The Board again used all of this information to deny licensure to this applicant in order to protect the life, health, safety, property, and welfare of California consumers.

If the Board were given the legislative authority to obtain criminal history information, the Board would collect fingerprints from all of its applicants and licensees and then submit them to the Department of Justice. Once the Board was listed in the system as an agency to receive criminal history information, such information would be automatically be sent to the Board whenever the information was entered into the system. The Board would no longer have to rely upon the truthfulness of its applicants to verify the information provided on applications nor would the Board have to wait for someone to submit a complaint regarding the conviction of a licensee. The Board's staff would review all of the criminal information and investigate any where the crime appeared to be substantially related to the qualifications, functions, and duties of the profession. If the evidence showed that the crime was substantially related, then the Board would use that to deny certification or licensure to the applicant or would pursue disciplinary action against the licensee.

*Legislative Action Needed:*

Business and Professions Code section 144 would need to be amended to specifically list the Board for Professional Engineers and Land Surveyors as one of the boards, bureaus, divisions, and programs under the Department of Consumer Affairs that may obtain both state and federal criminal history information.

In addition, new sections would need to be added to both the Professional Engineers Act (Business and Professions Code section 6700, et seq.) and the Professional Land Surveyors' Act (Business and Professions Code section 8700, et seq.) to give the Board the authority to collect fingerprints from its applicants and licensees and to obtain the criminal history information of the applicants and licensees. These new sections would also describe the requirements and responsibilities of the applicants and licensees and of the Department of Justice in processing fingerprints.

Last year, the Contractors State License Board, through its Sunset Review process, was given the authority to collect fingerprints and obtain criminal history information for its applicants and licensees.

The Board already has language drafted to be included in legislation for this proposal.

## **SECOND NEW ISSUE IDENTIFIED BY THE BOARD – PETITIONS TO THE BOARD RELATING TO ADMINISTRATIVE DISCIPLINARY ACTIONS**

The Professional Engineers Act (Business and Professions Code section 6700, et seq.) and the Professional Land Surveyors' Act (Business and Professions Code section 8700, et seq.) should be amended to specifically address petitions for reinstatement of revoked licenses and petitions for reduction or modification of penalty probation orders.

### **Background and Necessity:**

The Board may take disciplinary action against its licensees for certain specific violations. The disciplinary action taken can include revoking the license or placing the license on probation through a penalty probation order. In pursuing disciplinary action, the Board follows the Administrative Procedure Act (Chapter 3.5 (commencing with Section 11340), Chapter 4 (commencing with Section 11370), Chapter 4.5 (commencing with Section 11400), and Chapter 5 (commencing with Section 11500) of Part 1 of Division 3 of Title 2 of the Government Code).

Government Code section 11522 provides former licensees and licensees with the right to petition the Board for reinstatement of revoked licenses or for reduction or modification of penalty probation orders. This section simply states that a person must wait at least one year after the revocation of the license or after the penalty probation order before petitioning the Board for reinstatement of the revoked license or reduction or modification of the penalty probation order. This section also states that the person must wait at least one year after the denial of a previous petition before petitioning the Board again. Section 11522 describes certain actions the Board must take in considering these petitions. Finally, the section provides that it does not apply if the Board has separate statutory provisions regarding such petitions. At this time, the Board does not have separate statutory provisions; therefore, it must follow the provisions of Section 11522.

However, the Board does not believe that one year provides sufficient time for an individual whose conduct was so egregious as to warrant revocation of his license to become sufficiently rehabilitated and reeducation so as not to be a threat to the life, health, safety, welfare, and property of the public. The Board believes that extending the time period that such a person must wait before petitioning for reinstatement of the revoked license will provide that person with more time to come to terms with the revocation, and the actions that led to it, as well as providing more opportunity for rehabilitation. This, in turn, provides for better protection of California consumers. The Board also believes that basing the time period for petitions to reduce or modify penalty probation orders on the actual length of the probationary period, rather than just a standard one-year period for all cases, will also provide better public protection by ensuring that the individual serves an adequate rehabilitation and reeducation probation.

Furthermore, the Board believes that existing policies, as well as case law and legal opinions, regarding the procedures to be followed by all parties in such petitions should be codified to ensure that they are consistent and so that all parties are fully aware of their roles and responsibilities, as well as the Board's duties and options.

*Legislative Action Needed:*

For these reasons, the Board believes that new sections should be added to the Professional Engineers Act and the Professional Land Surveyors' Act regarding petitioning the Board for reinstatement of a revoked license or for reduction or modification of a penalty probation order. These sections would specify the minimum periods which must have elapsed following administrative disciplinary action before the subject of that action would be able to petition the Board for reinstatement of a revoked license or for reduction or modification of a penalty probation order. Additionally, these sections would codify current policies, case law, and legal opinions, regarding the procedures to be followed by all parties involved in such a petition.

Several other boards have successfully pursued similar legislation in the last two years.

The Board already has language drafted to be included in legislation for this proposal.

